BETHLEHEM STEEL
SHORELINE RECLAMATION PROJECT
PHASE ONE – PROJECT DEVELOPMENT

PROPOSAL

MARYLAND ENVIRONMENTAL SERVICE

TO

MARYLAND PORT ADMINISTRATION

MAY 12, 1992

MARYLAND ENVIRONMENTAL SERVICE

Maryland Department of Natural Resources

Maryland Environmental Service
2020 Industrial Drive
Annapolis, Maryland 21401
(301) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

May 21, 1992

Mr. Adrian Teel
Executive Director
Maryland Port Administration
The World Trade Center
Baltimore, MD 21202-3041

Dear Mr. Teel:

Enclosed is our proposal for the first phase of the Bethlehem Steel Shoreline Reclamation Project. The potential impact that this single project can make on the dredged material management program is significant. It will be the first major beneficial use project to be introduced in the upper bay. Its potential capacity and proximity to the channels will help make our future dredging efforts more productive and efficient. Bethlehem Steel Corporation is an extremely interested and cooperative corporate partner who is willing to participate in a successful beneficial use project.

The scope of work and cost proposal are essentially unchanged from the draft I presented to you at our April 15, 1992 coordination meeting. The exception is that Task 7 has been deleted as it is redundant with tasks contained in the pending LTMS Agreement. We have included a summary of the overall reclamation project concept, as well as the project approach, work schedule and management plan that we propose during Phase One.

We have made significant progress on streamlining the design and review process for this project. The Secretaries of the Department of Natural Resources and Maryland Department of the Environment have agreed to provide their support in order for us to achieve the most aggressive schedule possible. Dr. Brown has offered to compose a DNR/MDE technical team to assist us with developing a scope of work an A/E contract package. That assistance will help ensure that the most direct environmental and design course is taken. We also plan to subcontract the very critical hydrodynamic modeling work with MDE. The modeling experience and expertise which MDE's Chesapeake Bay and Special Projects Program offers will be a significant asset for performing this specialized work.

In order to meet our needs for the next 3-5 years we must now proceed as quickly as possible. We have designed this proposal to serve as an attachment to an Intergovernmental Agreement. We are prepared to begin work on Phase One in earnest June 1, 1992 or as soon as an Agreement can be executed. As you know, we have recently executed the license agreement with Bethlehem Steel. We have also completed the topographic and hydrographic surveys of the site.

The Maryland Environmental Service (MES) looks forward to working closely with the MPA on this important project. If we can assist in your review of this proposal in any way please do not hesitate to give me a call at (410) 974-7281.

Sincerely,

George G. Perdikakis
Director

GGP:kam
Enclosure
cc: Frank Hamons
Thomas Sprehe

BETHLEHEM STEEL
SHORELINE RECLAMATION PROJECT
PHASE ONE - PROJECT DEVELOPMENT

PROPOSAL
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TO
MARYLAND PORT ADMINISTRATION

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CONTENTS

2. PROJECT DEVELOPMENT APPROACH - PHASE ONE

The Tasks as presented below describe the approach to the Project Development Phase of the Bethlehem Steel Shoreline Reclamation Project. This approach is driven by the requirements of the MDOT architect/engineer selection process as defined in COMAR Section 21.12.02.

TASK 1. Topographic and Bathymetric Surveys

Detailed topographic and bathymetric surveys were conducted of the shoreline and adjacent waters, respectively. These surveys will be used to determine the alignment and the volumetric requirements of the project. Information from the surveys will also be used as input for the Hydrodynamic Study.

TASK 2. Hydrodynamic Study

A hydrodynamic study of the Patapsco River and Baltimore Harbor is required to determine the effects of the proposed reclamation project on the tidal parameters within the river system. Computer modeling will be employed to facilitate the project by optimizing the alignment relative to the Brewerton, Penwood and Sparrows Point Channels. The model will also address mixing zone dynamics with respect to the Bethlehem Steel Corporation outfalls in Stonehouse Cove. MES will develop the scope of work in conjunction with Maryland Department of the Environment. MDE will be subcontracted to procure and manage the services of a firm/agency specializing in hydrodynamic modeling.

TASK 3. Prepare Preliminary Design Concept

MES will develop design concept for the proposed project including the approach to the overall project, the proposed extent of the shoreline reclamation, proposed containment structure locations, preliminary capacity and preliminary construction cost estimates, and the locations of the final vegetated uplands and wetlands. MES will obtain and document input from recognized experts in the Chesapeake Bay region on creation and maintenance of wetlands habitat.

TASK 4. Develop A/E Scope of Work for Design

A scope of work will be developed for contracting the design of the shoreline reclamation in Phase Two. MES will assemble available information for the project including aerial photographs, topographic and hydrographic surveys, and other available engineering and environmental data. MES will coordinate with regulatory agencies for a preliminary identification of environmental requirements (e.g., NEPA, etc.) which are to be incorporated into the A/E Scope of Work. The Scope of Work will emphasize the early implementation of the placement operations.

TASK 5. Develop and Negotiate Agreements with Property Owner

The Bethlehem Steel Corporation owns the property proposed for shoreline reclamation. An agreement with BSC will demonstrate the commitment of the State to provide sites for placement of materials dredged from the channels leading into Baltimore Harbor. Moreover, it will demonstrate the partnership between the State and the private sector for providing beneficial use projects. A License

Agreement will also be developed and executed for the "Right of Entry" to the Bethlehem Steel property.

TASK 6. Public Participation

Public acceptance of the proposed project is very important to maintaining both overall cost and implementation schedule. MES will manage the public information and participation activities in order to secure public acceptance.

It is anticipated that up to five presentation meetings will be held to provide information for Federal, State, and local agencies as well as special interest groups and the general public.

TASK 7. Solicit and Select A/E for Design Phase

An Architect/Engineering firm will be selected for the execution of the Design Phase following A/E procurement guidelines contained in COMAR Section 21.12.02. A selection team will be assembled with members from MPA, MES, and other interests to review and evaluate the technical proposals. MES will coordinate and manage the selection team and will coordinate with the MPA project manager regarding Transportation Professional Services Selection Board matters. MES will also negotiate with the prospective firm at the direction of MPA.

3. WORK SCHEDULES

The schedules for performing the tasks described in Section 2 are presented in Figure 3. The anticipated start date for Phase One is June 1, 1992 and the completion date is scheduled for October 31, 1993.

As shown in Figure 4, the overall Project Schedule Phase Two could begin as early as July 1993, prior to completion of Phase One, and is estimated to be completed by August 1994. Phase Three construction activities could begin in spring 1994 and precede completion of Phase Two.

Phase Four operations and placement activities are expected to begin in 1994 and continue until approximately 2005, depending on operational factors and placement schedules. The scheduled overlap in phases as described above serves to compress the overall project implementation to gain dredged material placement capacity as quickly as possible.

BETHLEHEM STEEL

SHORELINE RECLAMATION

PHASE ONE PROJECT DEVELOPMENT

DETAILED SCHEDULE

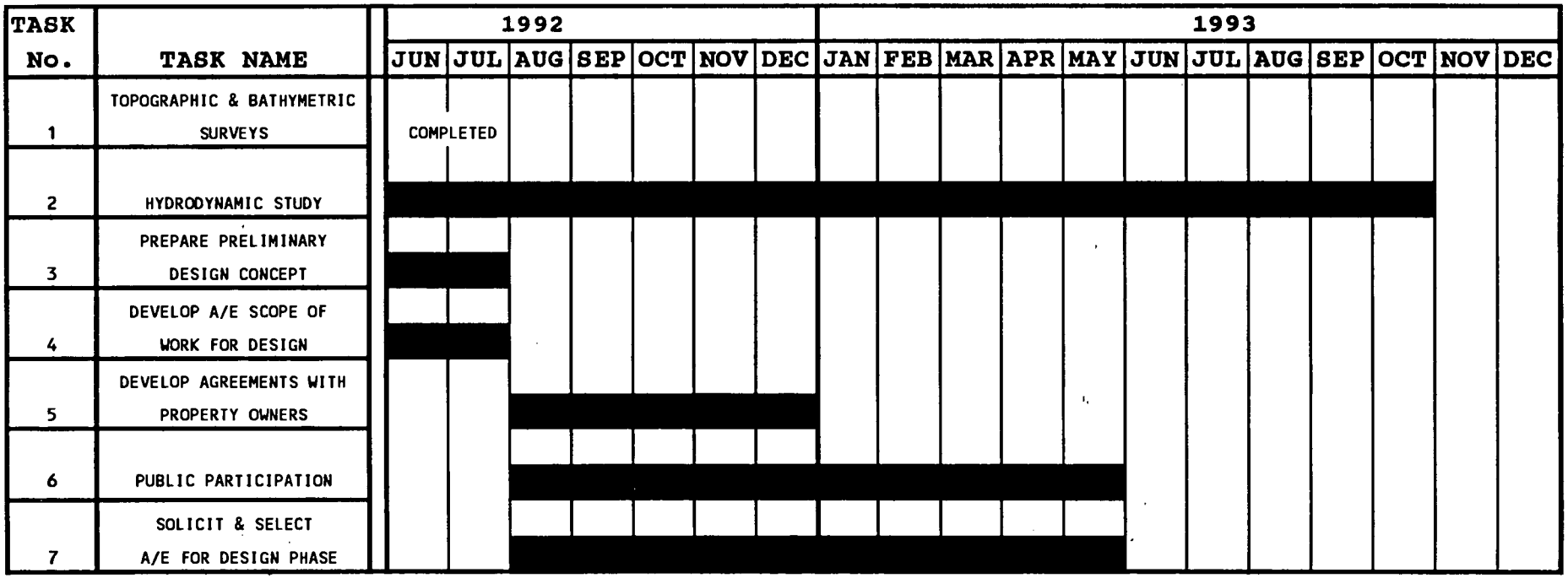

FIGURE 3

BETHLEHEM STEEL

SHORELINE RECLAMATION

OVERALL PROJECT SCHEDULE

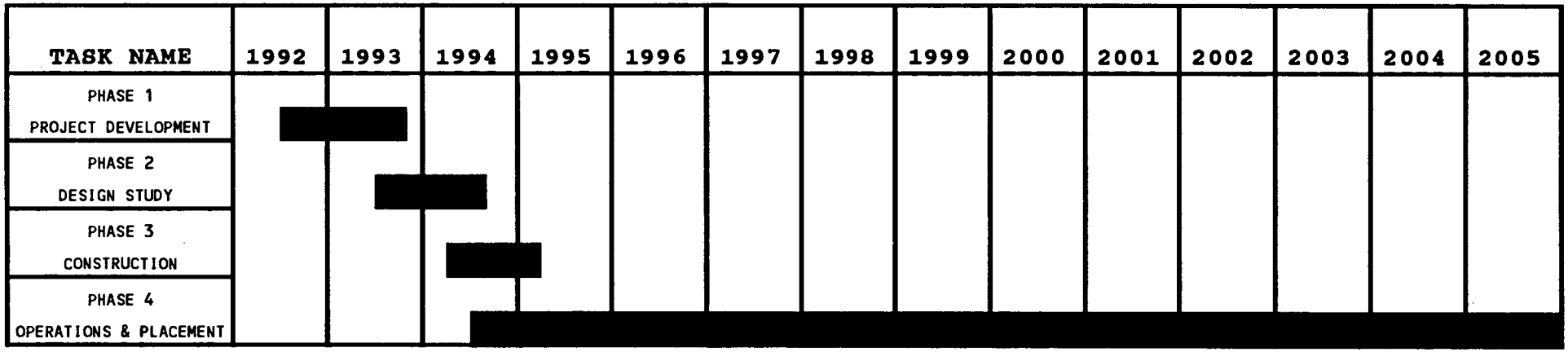

FIGURE 4

4. PROJECT MANAGEMENT AND ADMINISTRATION

MES will provide a project management team to work in conjunction with the MPA staff. The MES management team for this project are:

Program Director	Thomas G. Sprehe, P.E.
Senior Project Manager	Keith Tate, P.E.
Project Manager	Robert Smith

MES will manage the overall project direction in close coordination with MPA. Day to day activities will be handled by the project manager and will ensure schedule and budget compliance. Status updates will be provided as necessary to the MPA project manager. The management team will ensure quality control and contract compliance. Periodic reviews and coordination meetings are anticipated.

5. BUDGET

MES proposes a budget of $381,656 for the completion of Phase One, Bethlehem Steel Shoreline Reclamation Project. Funds will be expended in three Fiscal Years; FY 1992, FY 1993, FY 1994. Details of the budget follow.

Preliminary cost estimates for the remaining phases are shown below.

Phase Two - Design	$400,000 - $500,000
Phase Three - Construction	$20 - $30 Million
Phase Four - Operations	$1 - $2 Million/Year

TASK 1: Topographic and Bathymetric Surveys

DIRECT EXPENSES	$8,565
TOTAL CHARGES FOR TASK 1	$8,565

TASK 2: Hydrodynamic Study

LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	24	$1,526
	Sr. Project Manager	Keith Tate	$57.10	100	$5,710
	Project Manager	Robert Smith	$45.33	300	$13,599
	Program Admin.	Pamela McDonagh	$39.65	60	$2,379
	Secretary	Marianna Breth	$24.04	20	$481
TOTAL LABOR					$23,695

DIRECT EXPENSES	
MDE Consulting Services	$20,000
Subcontracted Modeling Services	$220,000
Travel	$600
Communications	$300
Supplies & Materials	$300
TOTAL DIRECT EXPENSES	$241,200
TOTAL CHARGES FOR TASK 2	$264,895

TASK 3: Prepare Preliminary Design Concept

LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	8	$509
	Sr. Project Manager	Keith Tate	$57.10	24	$1,370
	Project Manager	Robert Smith	$45.33	40	$1,813
	Project Engineer	Tarsem Thohan	$39.61	80	$3,169
	Project Engineer	Sepehr Baharlou	$30.69	100	$3,069
	Engineering Tech.	Chris Norris	$33.49	60	$2,009
	Engineering Co-Op	Curt Blazier	$19.18	60	$1,151
	Secretary	Marianna Breth	$24.04	20	$481
TOTAL LABOR					$13,571

DIRECT EXPENSES	
Consultant - Wetlands Evaluation	$10,000
Travel	$150
Postage/Express Mail	$200
Communications	$100
Computer Processing	$1,200
Supplies & Materials	$1,000
TOTAL DIRECT EXPENSES	$12,650
TOTAL CHARGES FOR TASK 3	$26,221

TASK 4: Develop A/E Scope of Work for Design

LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	60	$3,815
	Sr. Project Manager	Keith Tate	$57.10	100	$5,710
	Project Manager	Robert Smith	$45.33	200	$9,066
	Project Engineer	Tarsem Thohan	$39.61	60	$2,377
	Engineering Tech.	Chris Norris	$33.49	40	$1,340
	Engineering Co-Op	Andy Wilkerson	$20.50	60	$1,230
	Secretary	Marianna Breth	$24.04	60	$1,442
TOTAL LABOR					$24,979
DIRECT EXPENSES					
	Travel				$500
	Communications				$200
	Computer Processing				$300
	Supplies & Materials				$150
TOTAL DIRECT EXPENSES					$1,150
TOTAL CHARGES FOR TASK 4					$26,129

TASK 5: Develop and Negotiate Agreements with Property Owner

LABOR	$8,000
DIRECT EXPENSES	$400
TOTAL CHARGES FOR TASK 5	$8,400

TASK 6: Public Participation

LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	40	$2,543
	Sr. Project Manager	Keith Tate	$57.10	80	$4,568
	Project Manager	Robert Smith	$45.33	100	$4,533
	Project Engineer	Sepehr Baharlou	$30.69	60	$1,841
	Engineering Tech.	Chris Norris	$33.49	40	$1,340
	Public Affairs Rep.	Sonny Minnick	$29.83	80	$2,386
	Secretary	Marianna Breth	$24.04	24	$577
TOTAL LABOR					$17,789
DIRECT EXPENSES					
	Travel				$500
	Postage/Express Mail				$200
	Communications				$600
	Supplies & Materials				$500
	Computer Processing				300
TOTAL DIRECT EXPENSES					$2,100
TOTAL CHARGES FOR TASK 6					$19,889

TASK 7: Solicit and Select A/E for Design Phase

LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	40	$2,543
	Sr. Project Manager	Keith Tate	$57.10	100	$5,710
	Project Manager	Robert Smith	$45.33	200	$9,066
	Project Engineer	Tarsem Thohan	$39.61	80	$3,169
	Engineering Tech.	Chris Norris	$33.49	40	$1,340
	Program Admin.	Pamela McDonagh	$39.65	80	$3,172
	Secretary	Marianna Breth	$24.04	80	$1,956
TOTAL LABOR					$26,956
DIRECT EXPENSES					
	Travel				$500
	Postage/Express Mail				$500
	Communications				$400
	Supplies & Materials				$1,200
TOTAL DIRECT EXPENSES					$2,600
TOTAL CHARGES FOR TASK 7					$29,556

TOTAL PROJECT BUDGET					$381,656
LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	172	$10,936
	Sr. Project Manager	Keith Tate	$57.10	404	$23,068
	Project Manager	Robert Smith	$45.33	840	$38,077
	Project Engineer	Tarsem Thohan	$39.61	220	$8,714
	Project Engineer	Sepehr Baharlou	$30.69	160	$4,910
	Engineering Tech.	Chris Norris	$33.49	180	$6,028
	Public Affairs Rep.	Sonny Minnick	$29.83	80	$2,386
	Program Admin.	Pamela McDonagh	$39.65	140	$5,551
	Engineering Co-Op	Andy Wilkerson	$20.50	60	$1,230
	Engineering Co-Op	Curt Blazier	$19.18	60	$1,151
	Secretary	Marianna Breth	$24.04	204	$4,938
	Other Labor				$6,000
TOTAL LABOR					$112,991
DIRECT EXPENSES					
	MDE Consulting Services				$20,000
	Subcontracted Modeling Services				$220,000
	Consultant - Wetlands Evaluation				$10,000
	Mileage				$2,250
	Postage/Express Mail				$900
	Communications				$1,600
	Computer Processing				$1,800
	Supplies & Materials				$3,150
	Other Direct Expenses				$8,965
					$268,665
TOTAL PROJECT CHARGES					$381,656

BETHLEHEM STEEL SHORELINE RECLAMATION PROJECT

PRELIMINARY COST ESTIMATES

MAIN STRUCTURE

SCENARIO	LENGTH EAST SIDE	LENGTH WEST SIDE	WIDTH FACE	TOTAL LF	COST/LF	COST OF DIKES	CONTINGENCY (25%)	TOTAL COST
A	2000	2000	5000	9,000	$1,650	$14,850,000	$3,712,500	$18,562,500
B	3000	3000	5000	11,000	$1,650	$18,150,000	$4,537,500	$22,687,500
C	4000	4000	5000	13,000	$1,650	$21,450,000	$5,362,500	$26,812,500
D	5000	4000	5000	14,000	$1,650	$23,100,000	$5,775,000	$28,875,000
UPLAND DIKES	300	300	5000	10600	$120	$1,272,000	$318,000	$1,590,000
UNLOADING FACILITY						$750,000	$187,500	$937,500
DISCHARGE STRUCTURE				2 @ $200,000		$400,000	$100,000	$500,000
SUBTOTAL COST OF UPLAND DIKE AND PERIPHERAL FACILITIES								$3,027,500

ESTIMATED COST BASED ON THE MEDIAN STRUCTURE (SCENARIO B) $25,715,000

TOPOGRAPHIC MAP

OF

BETHLEHEM STEEL CORPORATION
SPARROWS POINT, MARYLAND

FOR

MARYLAND ENVIRONMENTAL SERVICE
ANNAPOLIS, MARYLAND

SCALE: 1"= 50' CONTOUR INTERVAL: 1'
DATE OF PHOTOGRAPHY: MAY 25,1991

SHEET 1 OF 5

HORIZONTAL CONTROL BASED ON MARYLAND STATE PLANE COORDINATE SYSTEM
VERTICAL CONTROL BASED ON MEAN SEA LEVEL 1929 DATUM.

PHOTOGRAMMETRY BY
HARFORD AERIAL SURVEYS, INC.
2028 YORK ROAD
TIMONIUM, MD. 21093

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SHEET 2 OF 5

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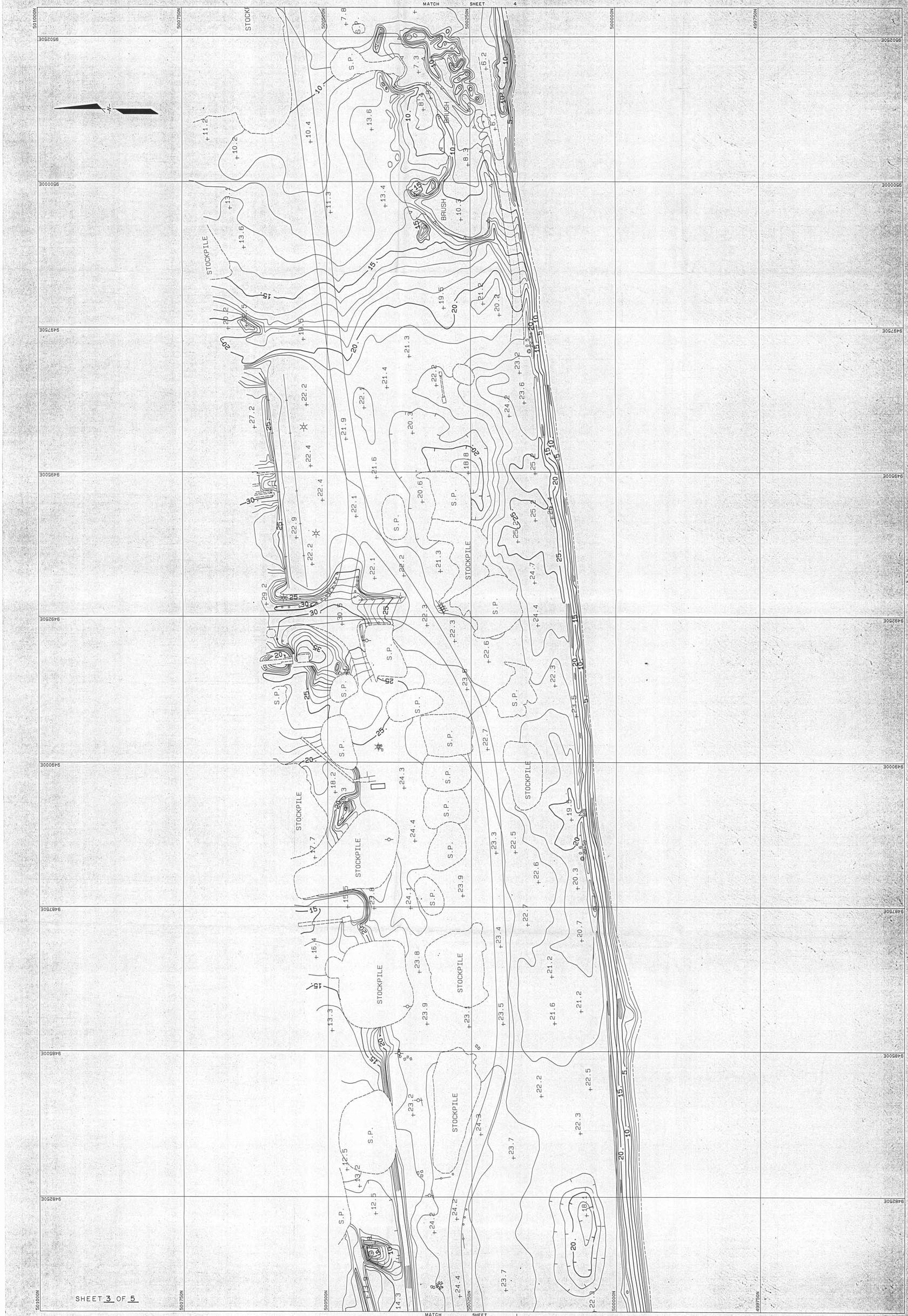
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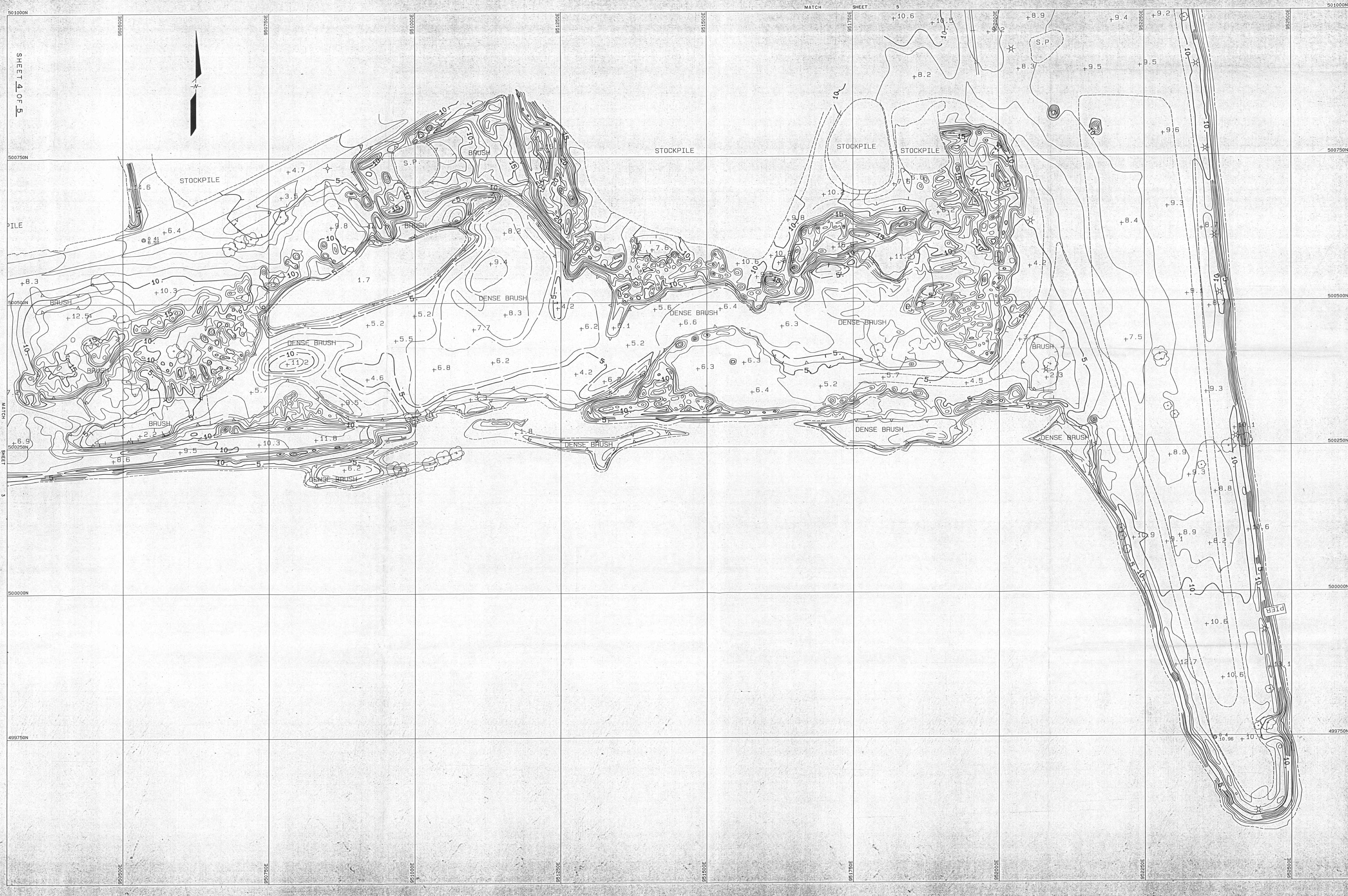
SHEET 3 OF 5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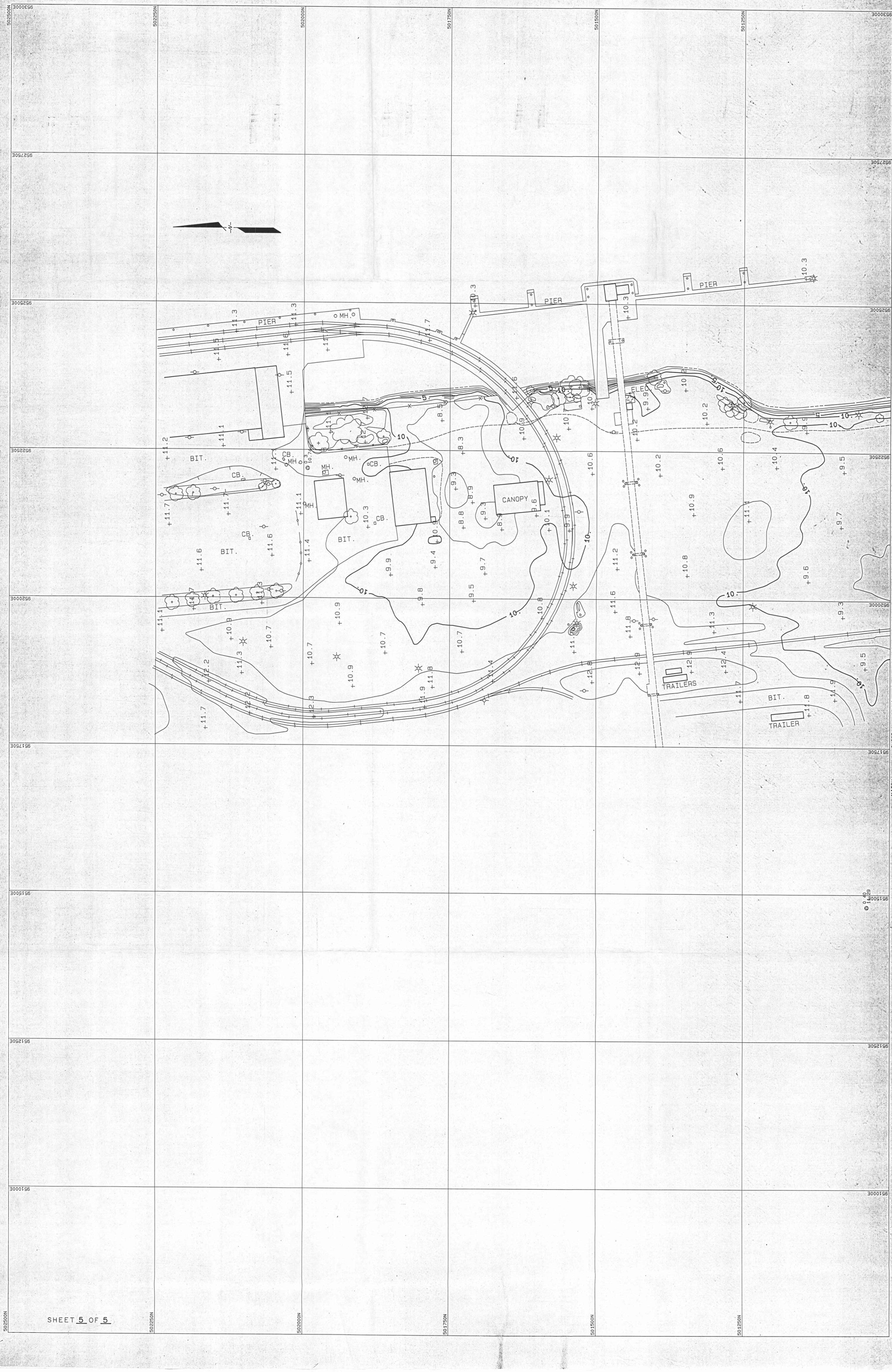
4 OF 5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MATCH SHEET
SHEET 5 OF 5

Maryland Department of Natural Resources

Maryland Environmental Service
2020 Industrial Drive
Annapolis, Maryland 21401
(301) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

September 21, 1992

Mr. William Lear
Harbor Development
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, MD 21224-6621

RE: Public Participation for
Bethlehem Steel Shoreline
Reclamation

Dear Mr. Lear:

MPA has inquired about some of the preliminary activities for public participation for the Shoreline Reclamation project. MPA has indicated that Maryland Environmental Service should begin such actions as identification of interested groups and individuals, scheduling of meetings, and investigation of informative pamphlets and brochures. Punctual execution of these activities will help maintain the pace of this project.

MES requests authorization to proceed on Task No. 6: Public Participation. If you have any questions or comments, please contact me at 974-7254.

Sincerely,

Robert L. Smith

Robert L. Smith
Project Manager

cc: Keith Tate

Maryland Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224-6621

October 6, 1992

Mr. Robert Smith
Maryland Environmental Service
2020 Industrial Drive
Annapolis, Maryland 21401

RE: Bethlehem Steel Shoreline Reclamation Project, Agreement No. 5933917

Dear Mr. Smith:

This is in response to your request for a Notice to Proceed for the Bethlehem Steel Shoreline Reclamation Project Agreement No. 593917, **Task 6 - Public participation.**

As you know, the Maryland Port Administration has initiated geotechnical investigations of the site to determine if the project should proceed to the feasibility and design phase. The results of this effort will be available around November 9, 1992.

Pending the outcome of the subsurface work and the consultants recommendations, we will consider proceeding with Task 6, Public Participation. In the meantime, I am requesting a detailed scope of work, schedule, and budget for Task 6. This information will help us execute a Notice to Proceed on a timely basis should we decide to do so.

If you have any questions concerning this information, please call me.

Sincerely,

Frank L. Hamons
Manager
Harbor Development

FLH/kyj
cc: W. Lear
A. Serio

permits:593917.np6

My telephone number is 410-631-1102

Fax: 1-410-631-

Maryland Department of Natural Resources

Maryland Environmental Service
2020 Industrial Drive
Annapolis, Maryland 21401
(301) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

September 29, 1992

Mr. William Lear, Planner
Harbor Development
Maryland Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224-6621

Dear Mr. Lear:

Enclosed for your files is the fully executed Amendatory Agreement with the Maryland Environmental Service for the geotechnical assessment for the Bethlehem Steel Shoreline Reclamation Project.

For future reference, this Agreement has been assigned MES Contract No. 93-03-7/9-92.

Please contact Mr. Keith Tate at 974-7254 if you have any problems.

Sincerely,

Nancy H. Voorhees Balenske

Nancy H. Voorhees Balenske
Contract Administrator

NHVB:ar
Enclosure
cc: Keith Tate

CONTRACT # 593917
BETHLEHEM STEEL SHORELINE RECLAMATION
PROJECT. AMENDMENT # 1

AMENDATORY AGREEMENT

BETWEEN

MARYLAND ENVIRONMENTAL SERVICE

AND

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND PORT ADMINISTRATION

(93-03-7)

THIS AMENDATORY AGREEMENT, dated **this** 29th **day of** September, **1992,** by and between the Maryland Environmental Service, a body politic and corporate constituting an instrumentality of the State of Maryland (hereinafter referred to as the "Service") and the Maryland Department of Transportation, Maryland Port Administration (hereinafter referred to as the "MDOT/MPA").

R E C I T A L S

WHEREAS, the parties entered into an Interagency Agreement dated July 16, 1992, to perform an analysis of the Bethlehem Steel shoreline and adjacent State waters to determine its potential for beneficial placement of dredged material and the effects of placement in Baltimore Harbor and its environs; and

WHEREAS, a geotechnical assessment is required to determine the foundation characteristics and the bottom sediment conditions in the project area.

NOW, THEREFORE, for and in consideration of the premises and agreements herein set forth, the parties hereto agree as follows:

1. The Service shall perform certain tasks to assist MDOT/MPA in the development and implementation of the geotechnical assessment as outlined in the Scope of Work, attached hereto and made a part hereof.

2. The work shall be performed in accordance with the Budget attached hereto and made a part hereof for the fixed amount of Seven Thousand Five Hundred Eighty-eight Dollars and Thirty-two Cents ($7,588.32). Total funding under the Agreement shall not exceed Three Hundred Eighty-nine Thousand Two Hundred Forty-four Dollars and Thirty-two Cents ($389,244.32).

3. All other terms and conditions of the Agreement shall remain the same.

MARYLAND ENVIRONMENTAL SERVICE

Rachel J. Leos
WITNESS

BY _____
GEORGE G. PERDIKAKIS
DIRECTOR

MARYLAND PORT ADMINISTRATION

Kathleen Kotula
WITNESS

BY _____
ADRIAN G. TEEL
EXECUTIVE DIRECTOR

Approved as to legal form and sufficiency this 28th day of September, 1992.

Sean Coleman
Assistant Attorney General
Maryland Environmental Service

Approved as to legal form and sufficiency this 11th day of September, 1992.

Assistant Attorney General
Maryland Port Administration

Funding Approval

Gregory G. Russell
Director of Finance
Maryland Port Administration

SCOPE OF WORK

BETHLEHEM STEEL PROJECT - PHASE I

GEOTECHNICAL ASSESSMENT

A geotechnical assessment is required to determine the foundation characteristics and the bottom sediment conditions in the project area. The Maryland Port Administration will procure an A-E firm to perform the assessment. The Maryland Environmental Service will perform the following tasks to assist MPA in development and implementation of this assessment. The final results will be integrated into the Phase I concept designs.

- assess available information including topographic, bathymetric surveys and boring logs.

- develop the objectives of the geotechnical assessment with MPA.

- revise Phase I tasks and schedule to incorporate geotechnical assessment.

- develop a scope of work for performing the field investigation, laboratory tests and engineering assessment.

- assist MPA with selection of the geotechnical consultant (A-E) for the MPA.

    - o Review MPA's request for proposal
    - o Review A-E technical proposals
    - o Participate in ranking and selection of A-E

- integrate the results and recommendations of the study into the Phase I design concepts.

BUDGET
BETHLEHEM STEEL PROJECT - PHASE I
GEOTECHNICAL ASSESSMENT

LABOR	Labor Category	Employee	Rate	Hours	Costs
	Sr. Project Manager	Keith Tate	$57.10	60	$3,426.00
	Project Manager	Robert Smith	45.33	60	2,719.80
	Project Engineer	Tarsem Thohan	39.61	24	950.64
	Engineering Tech.	Chris Norris	33.49	12	401.88
TOTAL LABOR					$7,498.32
DIRECT EXPENSES					
	Travel				90.00
TOTAL DIRECT EXPENSES					90.00
TOTAL CHARGES FOR GEOTECHNICAL ASSESSMENT					$7,588.32

copy - Bill
David
file

Maryland Department of Natural Resources

Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, Maryland 21401
(410) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

NOV 17 1992

November 12, 1992

Mr. Frank L. Hamons
Manager, Harbor Development
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, MD 21224-6621

RE: A-E Scope of Work

Dear Mr. Hamons:

Attached for your review and approval is the Draft Scope of Work for the Architect-Engineer Solicitation for the Bethlehem Steel Shoreline Reclamation Project. It is also being reviewed concurrently by the Maryland Department of the Environment (MDE) and the Department of Natural Resources (DNR).

The Bureau of Consulting Services requires the Scope of Work early in the procurement process in order to release a notice for Solicitation of Interest. The attached Draft Scope should be sufficient for this activity. After comments/approval are received from MDE, DNR and MPA, MES will incorporate the Scope of Work into the Request for Proposal (RFP).

MES requests that all comments be submitted no later than November 27, 1992. If you have any questions about this, please call me at (410) 974-7254.

Sincerely,

Robert L. Smith

Robert L. Smith
Project Manager

RLS:kam
Attachments
cc: Lee Zeni
Keith Tate

BETHLEHEM STEEL SHORELINE RECLAMATION PROJECT
PHASE II
ENGINEERING & ENVIRONMENTAL STUDIES
SCOPE OF WORK

INTRODUCTION

The Maryland Port Administration (MPA) is responsible for maintaining the access channels for the Port of Baltimore. This includes the dredging operations and the dredged materials removed from the channels. MPA proposes to reclaim shoreline at Bethlehem Steel's Sparrows Point facility using dredged materials to create wetland and upland habitat (the "Project") and has contracted Maryland Environmental Service (MES) to manage the Project. It will be the first major project in the upper Chesapeake Bay emphasizing the beneficial use of dredged material.

MPA and MES have entered into an agreement with Bethlehem Steel Corporation (BSC) to enhance a portion of BSC's shoreline and adjacent State waters in Baltimore County, Maryland, by placing clean dredged material to form a vegetated berm with upland and wetland habitat.

The Project site, owned by the Bethlehem Steel Corporation, is located on Sparrows Point on the Patapsco River downstream from Baltimore Harbor and is shown in Figure 1. The designated location for the reclamation project, shown in Figure 2, consists of approximately 5000 feet of shoreline and is bounded on three sides by the Brewerton, the Penwood, and the Sparrows Point Channels. The Project will use the sediments dredged from the harbor approach channels to create several hundred acres of wetland and upland habitat for the wildlife along the river. A 300-foot wide easement along the shoreline has been allocated for the Project.

The following outline is intended to define the scope of work to be performed by the Consultant and not to establish the sequence of work. The Consultant will be responsible for developing and

FIGURE 1

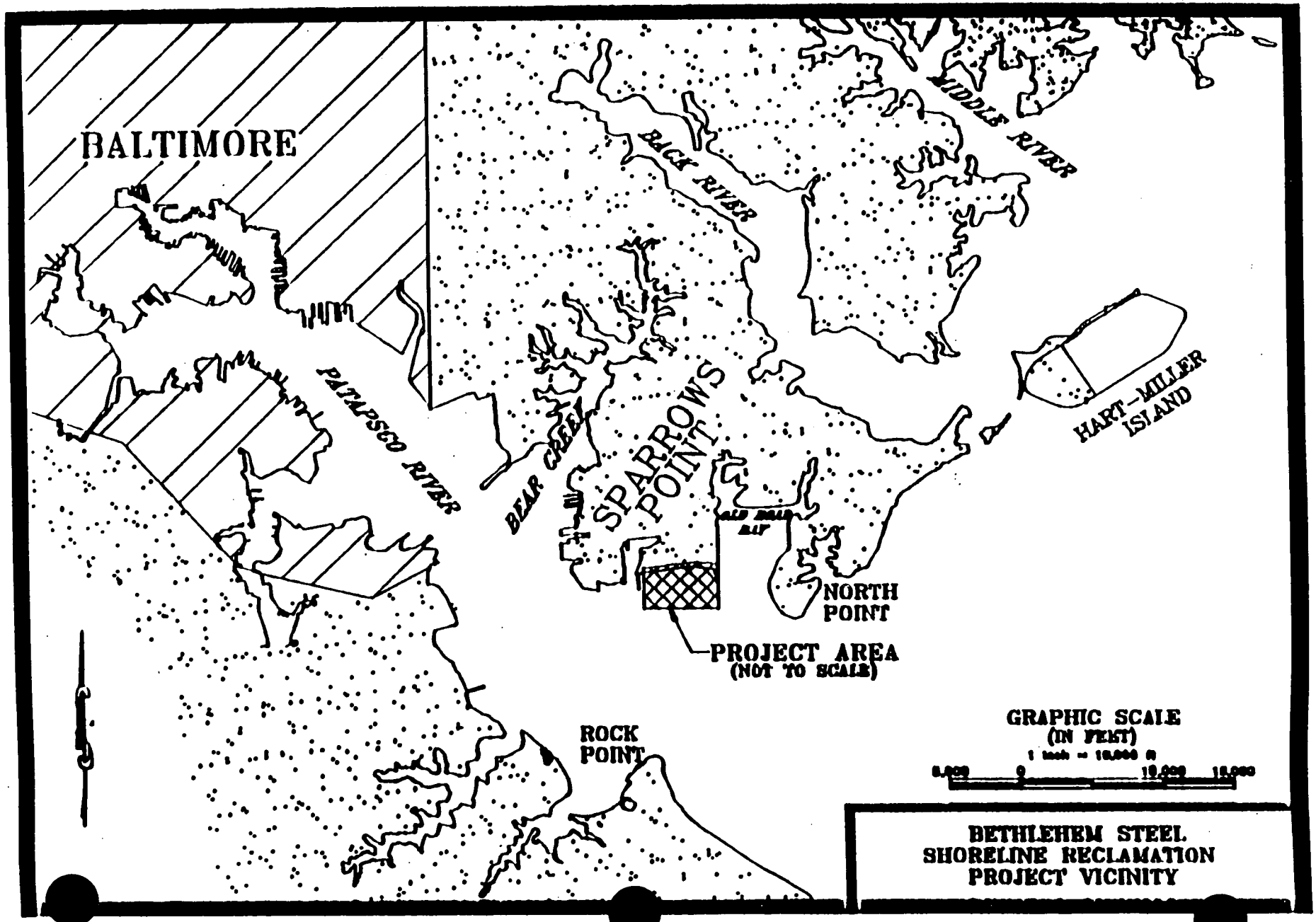
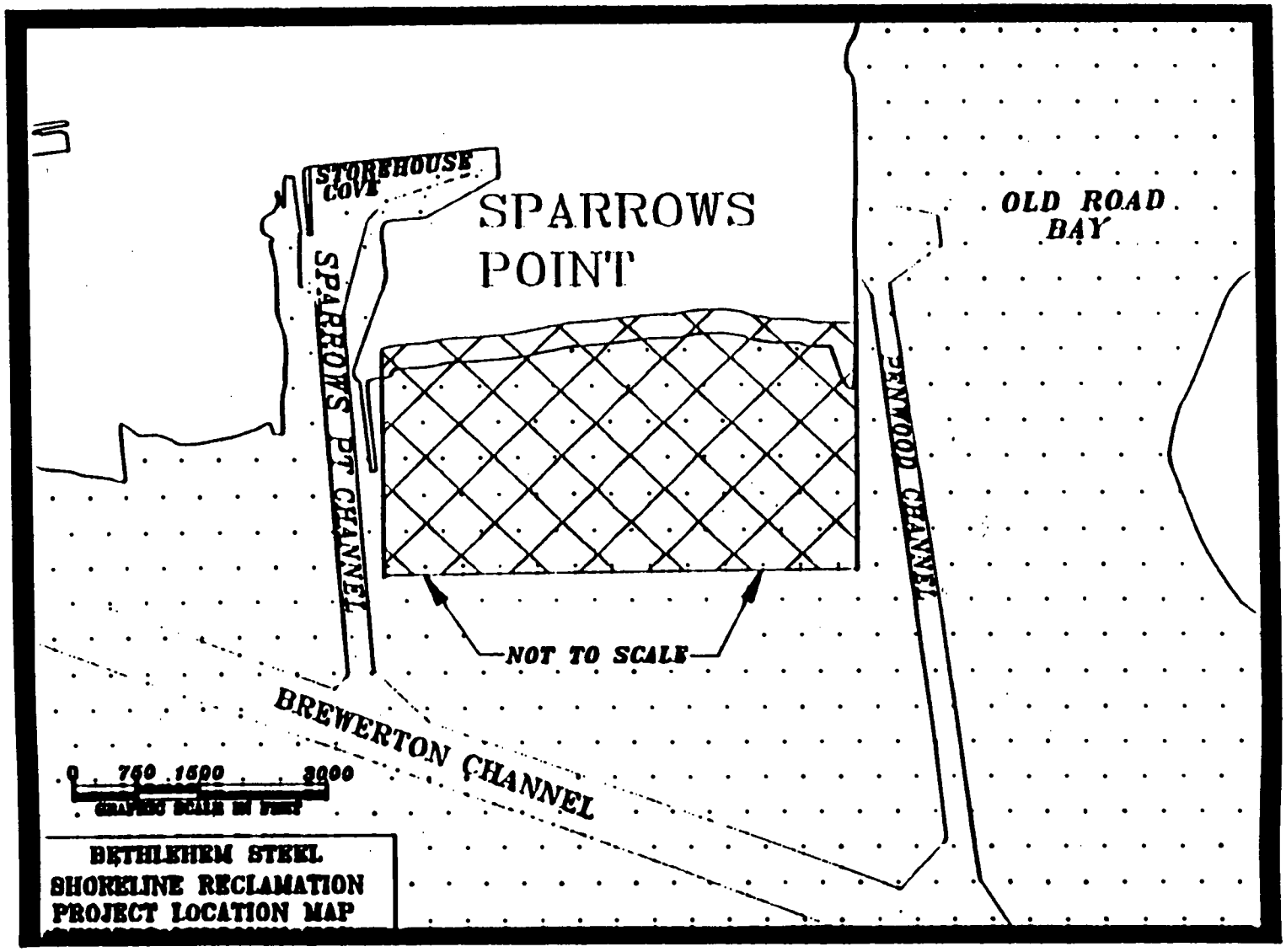

BALTIMORE
BACK RIVER
MIDDLE RIVER
PATAPSCO RIVER
BEAR CREEK
SPARROWS POINT
HART-MILLER ISLAND
NORTH POINT
PROJECT AREA
(NOT TO SCALE)
ROCK POINT
GRAPHIC SCALE
(IN FEET)
0
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT VICINITY

FIGURE 2


STOREHOUSE COVE
SPARROWS POINT
OLD ROAD BAY
SPARROWS PT CHANNEL
SEWELL CHANNEL
NOT TO SCALE
BREWERTON CHANNEL
0 750 1500 3000
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT LOCATION MAP

maintaining a detailed scope of work and progress schedule for the Project which shall be subject to the approval of MPA. The Consultant shall develop the Project to the level of preparing Final Permit Applications, Construction Plans and Specifications, cost estimates, and schedules for awarding a contract for the construction of a facility for dredged materials.

ENGINEERING STUDY

TASK I. Scope Refinement and Inventory

A. The Consultant shall attend an initial conference with MPA to finalize the schedule, scope of services and administrative procedures for the coordination of the Project.

B. The Consultant shall assemble physical data concerning the Project site. The A-E will be provided topographic and bathymetric surveys data; aerial photographs of the site; results from the hydrodynamic model study; and preliminary geotechnical assessment and foundation criteria.

TASK II. Site Development

The Consultant shall review the information concerning the Project site and consult with MPA staff to determine the schedule for development, estimated capacity of the facility, the types of dredged materials, the sequence and method of placement of dredged material, procedures for managing the Project site, and the desired site characteristics after the completion of dredged material placement operations.

TASK III. Alternative Site Layouts and Selections

A. The Consultant shall evaluate a minimum of three alternative site layouts and determine the effectiveness of each with respect to the site performance requirements.

B. The Consultant shall further review the performance of each site layout in consultation with MPA staff to select the layout to be developed.

TASK IV. Field Investigations

The Consultant shall conduct field investigations necessary to develop the design and cost estimates for the selected site layout. The design will be based upon existing information and conditions as determined by new topographic mapping surveys. Field investigations will consist of hydrographic surveys and geotechnical analysis along the centerline of the retaining structure for the selected site layout.

TASK V. Design

The Consultant shall prepare design details for the Project site including but not limited to; cross-sections of the retaining structure, slope protection, spillways, and unloading facilities for dredged materials. The Consultant shall also plans, profiles, and cross sections necessary to develop the cost estimates and prepare the permits for the Project.

TASK VI. Cost Estimates

The Consultant shall prepare estimates for the construction, operation and maintenance costs for the Project in sufficient detail for Permit Application.

TASK VII. Reports

The Consultant shall prepare and submit ten (10) copies of an engineering report presenting the results of the above work.

ENVIRONMENTAL STUDY

TASK I. Scope Refinement

The Consultant shall attend an initial conference with MPA to finalize the schedule, scope of services and administrative procedures for the coordination of the study.

TASK II. Field Investigations

The Consultant shall conduct an environmental survey of the Project site. The survey shall include, but will not be limited to, the following:

(a) Sediment Quality - Four (4) composites of subsamples from the geotechnical investigations (two shallow, two deep) to be analyzed for priority pollutants, nutrients, oil and grease, and iron.

(b) Water Quality - Two (2) vertically-composited samples to be analyzed for the same constituents as (a) above.

(c) Aquatic Ecology - Three (3) surveys (Spring, Summer, and Autumn) to address:

- benthic invertebrates (four stations)
- ichthyoplankton (two stations)
- fish (two seines and two trawl stations)
- submerged aquatic vegetation (species present and locations of each within the Project site)

At each station, in-situ measurements of pH, dissolved oxygen, temperature and salinity shall be performed at the water surface, at mid-depth and at the bottom. At each benthic station substrate characteristics (sand, silt, clay, water and organic content) shall be determined. Data analysis should include relative abundance, diversity, and distribution of benthos, ichthyoplankton and fish.

(d) Terrestrial Ecology - One survey to address flora and fauna present and delineation of tidal and non-tidal wetlands.

TASK III. Reports

The Consultant shall prepare and deliver ten (10) copies of the environmental assessment and a critical areas report. The environmental assessment shall include, but is not limited, to :

(a) description of the proposed action, purpose and need
(b) environmental setting (i.e., natural and human environment including protected species, and archeological/historical features)
(c) effect of proposed action and alternatives (construction and operations)
(d) mitigation of unavoidable impacts (consultant shall assist MPA in identifying acceptable mitigation options)

TASK IV. Permit Applications

The Consultant shall prepare for MPA's signature applications for the necessary permits including but not limited to the Department of the Army Permit (Section 10, Section 404), Maryland State Wetlands License, and Critical Areas Program approval.

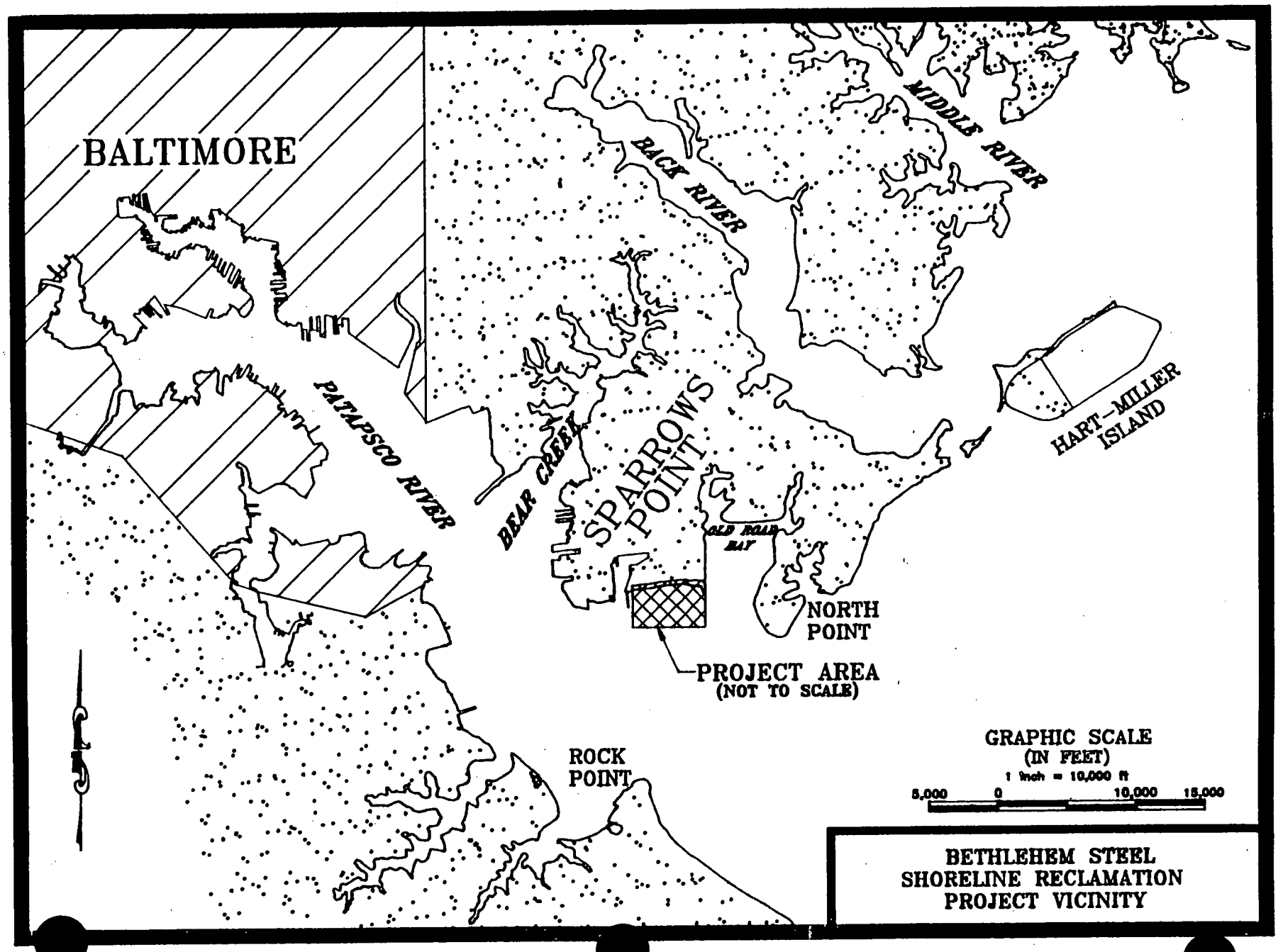
CONTENTS

1. RECLAMATION PROJECT SUMMARY

This proposal addresses the first phase of an aggressive multi-year project for utilizing clean dredged materials for the reclamation of the Bethlehem Steel shoreline. This unique beneficial use project would be executed in four phases; Project Development, Project Design, Project Construction, and Operations and Placement.

The proposed project site, owned by the Bethlehem Steel Corporation (BSC), is located on Sparrows Point on the Patapsco River downstream from Baltimore Harbor and is shown in Figure 1. The designated site for the reclamation project consists of approximately 5000 feet of shoreline and is bounded on three sides by the Brewerton, the Penwood, and the Sparrows Point Channels as shown in Figure 2. Preliminary capacity estimates range from 5 to 10 million cubic yards. Preliminary construction cost estimates are in the $20-30 million range. A 300 foot wide easement along the shoreline has been allocated for the project. BSC has agreed to participate with agencies of the State of Maryland to enhance the shoreline. The proposed project will use the sediments dredged from the harbor approach channels to create upland and wetland habitat for the wildlife along the river. Several hundred acres of habitat creation is planned.

FIGURE 1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1 inch = 10,000 ft
5,000 0 10,000 15,000
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT VICINITY

Maryland Environmental Service proposes to execute the project in four phases. The goal of Phase One is to facilitate the completion of the following:

- o development of the reclamation concepts
- o development and execution of hydrodynamic model
- o development of the A/E scope of work for design phase
- o procurement of A/E for design phase
- o generate Agency and Public support of project.

The design of the project would be executed by MES in Phase Two to include engineering and environmental studies which would yield the final plans and specifications for construction. The design will feature an onshore dewatering facility and an offshore containment area. MES proposes to have the onshore facility operational as soon as possible and will structure the architect/engineer scope of work accordingly.

The plans and specifications would be used by MES to award a construction contract in Phase Three. The Construction Phase would also emphasize having the onshore facility operational as quickly as possible.

The placement of dredged sediments in Phase Four would closely follow the completion of the onshore dewatering facility and could continue for as much as 10 to 12 years as the capacity of the offshore containment facility is utilized. MES would manage the operations of the site in this phase to ensure that maximum capacity is achieved. Placement sequencing would be utilized to

facilitate the construction of the upland and wetland habitats. The dredged materials which have been dewatered would be used to construct a berm at the shoreside boundary of the site. This berm would be planted with native species of shrubs, trees, etc. and developed into upland habitat which would act as a visual buffer between the river and the Sparrows Point industrial complex. The sediments in the offshore area of the site would be strategically placed and sculpted within the tidal zone. The area would be planted as wetland habitat.

2. PROJECT DEVELOPMENT APPROACH - PHASE ONE

The Tasks as presented below describe the approach to the Project Development Phase of the Bethlehem Steel Shoreline Reclamation Project. This approach is driven by the requirements of the MDOT architect/engineer selection process as defined in COMAR Section 21.12.02.

TASK 1. Topographic and Bathymetric Surveys

Detailed topographic and bathymetric surveys were conducted of the shoreline and adjacent waters, respectively. These surveys will be used to determine the alignment and the volumetric requirements of the project. Information from the surveys will also be used as input for the Hydrodynamic Study.

TASK 2. Hydrodynamic Study

A hydrodynamic study of the Patapsco River and Baltimore Harbor is required to determine the effects of the proposed reclamation project on the tidal parameters within the river system. Computer modeling will be employed to facilitate the project by optimizing the alignment relative to the Brewerton, Penwood and Sparrows Point Channels. The model will also address mixing zone dynamics with respect to the Bethlehem Steel Corporation outfalls in Stonehouse Cove. ~~MDE~~ will develop the scope of work in conjunction with Maryland Department of the Environment. MDE will be subcontracted to procure and manage the services of a firm/agency specializing in hydrodynamic modeling.

TASK 3. Prepare Preliminary Design Concept

MES will develop design concept for the proposed project including the approach to the overall project, the proposed extent of the shoreline reclamation, proposed containment structure locations, preliminary capacity and preliminary construction cost estimates, and the locations of the final vegetated uplands and wetlands. MES will obtain and document input from recognized experts in the Chesapeake Bay region on creation and maintenance of wetlands habitat.

TASK 4. Develop A/E Scope of Work for Design

A scope of work will be developed for contracting the design of the shoreline reclamation in Phase Two. MES will assemble available information for the project including aerial photographs, topographic and hydrographic surveys, and other available engineering and environmental data. MES will coordinate with regulatory agencies for a preliminary identification of environmental requirements (e.g., NEPA, etc.) which are to be incorporated into the A/E Scope of Work. The Scope of Work will emphasize the early implementation of the placement operations.

TASK 5. Develop and Negotiate Agreements with Property Owner

The Bethlehem Steel Corporation owns the property proposed for shoreline reclamation. An agreement with BSC will demonstrate the commitment of the State to provide sites for placement of materials dredged from the channels leading into Baltimore Harbor. Moreover, it will demonstrate the partnership between the State and the private sector for providing beneficial use projects. A License

Agreement will also be developed and executed for the "Right of Entry" to the Bethlehem Steel property.

TASK 6. Public Participation

Public acceptance of the proposed project is very important to maintaining both overall cost and implementation schedule. ~~MES~~ will manage the public information and participation activities in order to secure public acceptance.

It is anticipated that up to five presentation meetings will be held to provide information for Federal, State, and local agencies as well as special interest groups and the general public.

TASK 7. Solicit and Select A/E for Design Phase

An Architect/Engineering firm will be selected for the execution of the Design Phase following A/E procurement guidelines contained in COMAR Section 21.12.02. A selection team will be assembled with members from MPA, MES, and other interests to review and evaluate the technical proposals. ~~MES~~ will coordinate and manage the selection team and will coordinate with the MPA project manager regarding Transportation Professional Services Selection Board matters. ~~MES~~ will also negotiate with the prospective firm at the direction of MPA.

3. WORK SCHEDULES

The schedules for performing the tasks described in Section 2 are presented in Figure 3. The anticipated start date for Phase One is June 1, 1992 and the completion date is scheduled for October 31, 1993.

As shown in Figure 4, the overall Project Schedule Phase Two could begin as early as July 1993, prior to completion of Phase One, and is estimated to be completed by August 1994. Phase Three construction activities could begin in spring 1994 and precede completion of Phase Two.

Phase Four operations and placement activities are expected to begin in 1994 and continue until approximately 2005, depending on operational factors and placement schedules. The scheduled operating in phases as described above serves to compress the overall project implementation to gain dredged material placement capacity as quickly as possible.

BETHLEHEM STEEL

SHORELINE RECLAMATION

PHASE ONE PROJECT DEVELOPMENT

DETAILED SCHEDULE

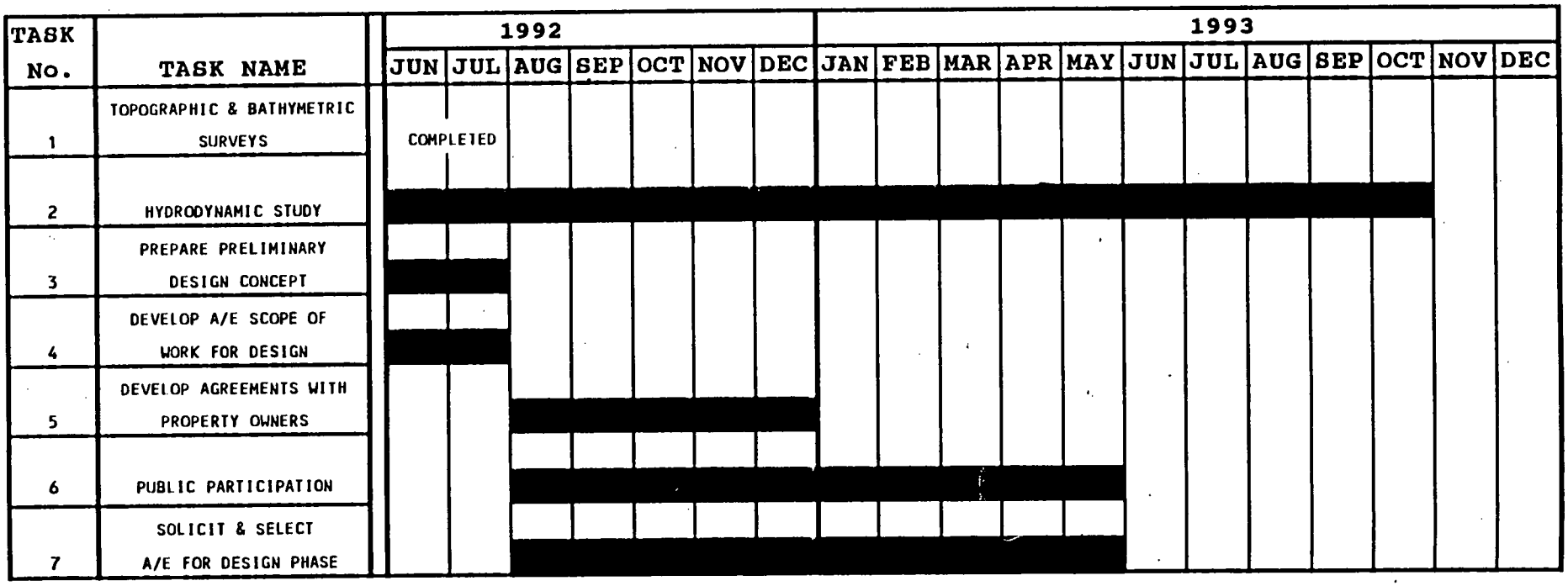


FIGURE 3

BETHLEHEM STEEL

SHORELINE RECLAMATION

OVERALL PROJECT SCHEDULE

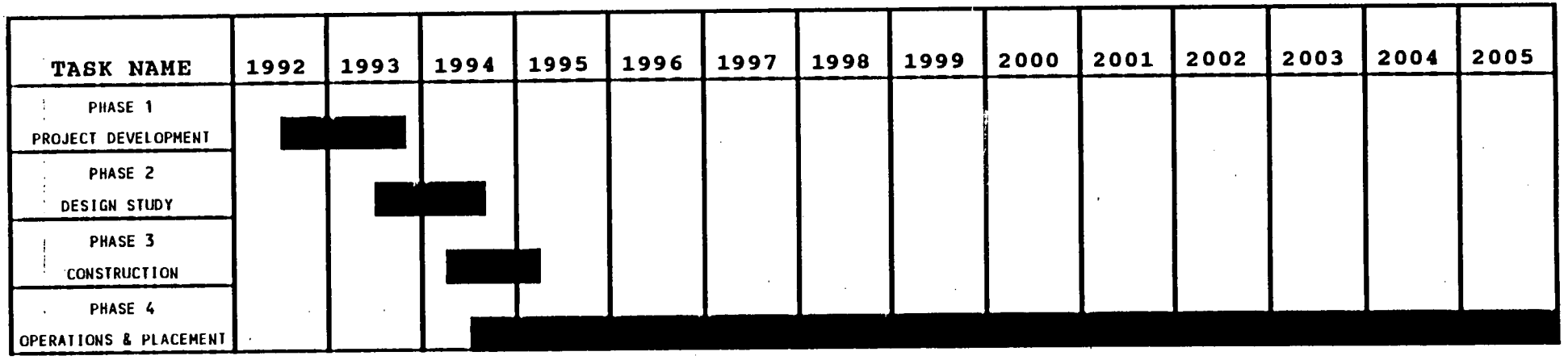


FIGURE 4

4. PROJECT MANAGEMENT AND ADMINISTRATION

MES will provide a project management team to work in conjunction with the MPA staff. The MES management team for this project are:

Program Director	Thomas G. Sprehe, P.E.
Senior Project Manager	Keith Tate, P.E.
Project Manager	Robert Smith

MES will manage the overall project direction in close coordination with MPA. Day to day activities will be handled by the project manager and will ensure schedule and budget compliance. Status updates will be provided as necessary to the MPA project manager. The management team will ensure quality control and contract compliance. Periodic reviews and coordination meetings are anticipated.

5. BUDGET

~~MES~~ proposes a budget of $381,656 for the completion of Phase One, Bethlehem Steel Shoreline Reclamation Project. Funds will be expended in three Fiscal Years; FY 1992, FY 1993, FY 1994. Details of the budget follow.

Preliminary cost estimates for the remaining phases are shown below.

Phase Two - Design	$400,000 - $500,000
Phase Three - Construction	$20 - $30 Million
Phase Four - Operations	$1 - $2 Million/Year

TASK 1: Topographic and Bathymetric Surveys

DIRECT EXPENSES	$8,565
TOTAL CHARGES FOR TASK 1	$8,565

TASK 2: Hydrodynamic Study

LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	24	$1,526
	Sr. Project Manager	Keith Tate	$57.10	100	$5,710
	Project Manager	Robert Smith	$45.33	300	$13,599
	Program Admin.	Pamela McDonagh	$39.65	60	$2,379
	Secretary	Marianna Breth	$24.04	20	$481
TOTAL LABOR					$23,695

DIRECT EXPENSES	
MDE Consulting Services	$20,000
Subcontracted Modeling Services	$220,000
Travel	$600
Communications	$300
Supplies & Materials	$300
TOTAL DIRECT EXPENSES	$241,200
TOTAL CHARGES FOR TASK 2	$264,895

TASK 3: Prepare Preliminary Design Concept

LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	8	$509
	Sr. Project Manager	Keith Tate	$57.10	24	$1,370
	Project Manager	Robert Smith	$45.33	40	$1,813
	Project Engineer	Tarsem Thohan	$39.61	80	$3,169
	Project Engineer	Sepehr Baharlou	$30.69	100	$3,069
	Engineering Tech.	Chris Norris	$33.49	60	$2,009
	Engineering Co-Op	Curt Blazier	$19.18	60	$1,151
	Secretary	Marianna Breth	$24.04	20	$481
TOTAL LABOR					$13,571

DIRECT EXPENSES	
Consultant - Wetlands Evaluation	$10,000
Travel	$150
Postage/Express Mail	$200
Communications	$100
Computer Processing	$1,200
Supplies & Materials	$1,000
TOTAL DIRECT EXPENSES	$12,650
TOTAL CHARGES FOR TASK 3	$26,221

TASK 4: Develop A/E Scope of Work for Design

LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	60	$3,815
	Sr. Project Manager	Keith Tate	$57.10	100	$5,710
	Project Manager	Robert Smith	$45.33	200	$9,066
	Project Engineer	Tarsem Thohan	$39.61	60	$2,377
	Engineering Tech.	Chris Norris	$33.49	40	$1,340
	Engineering Co-Op	Andy Wilkerson	$20.50	60	$1,230
	Secretary	Marianna Breth	$24.04	60	$1,442
TOTAL LABOR					$24,979
DIRECT EXPENSES					
	Travel				$500
	Communications				$200
	Computer Processing				$300
	Supplies & Materials				$150
TOTAL DIRECT EXPENSES					$1,150
TOTAL CHARGES FOR TASK 4					$26,129

TASK 5: Develop and Negotiate Agreements with Property Owner

LABOR	$8,000
DIRECT EXPENSES	$400
TOTAL CHARGES FOR TASK 5	$8,400

TASK 6: Public Participation

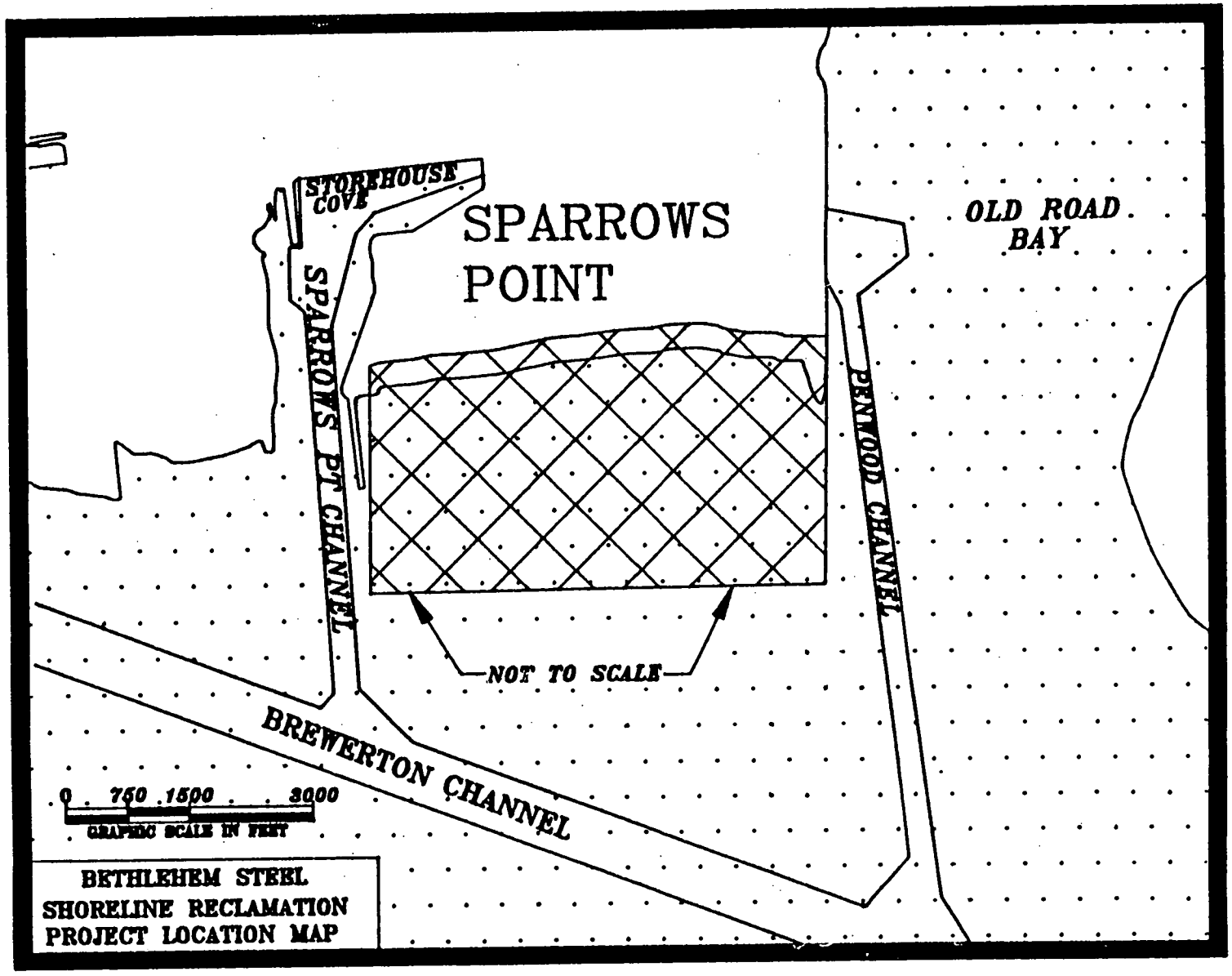
LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	40	$2,543
	Sr. Project Manager	Keith Tate	$57.10	80	$4,568
	Project Manager	Robert Smith	$45.33	100	$4,533
	Project Engineer	Sepehr Baharlou	$30.69	60	$1,841
	Engineering Tech.	Chris Norris	$33.49	40	$1,340
	Public Affairs Rep.	Sonny Minnick	$29.83	80	$2,386
	Secretary	Marianna Breth	$24.04	24	$577
TOTAL LABOR					$17,789
DIRECT EXPENSES					
	Travel				$500
	Postage/Express Mail				$200
	Communications				$600
	Supplies & Materials				$500
	Computer Processing				300
TOTAL DIRECT EXPENSES					$2,100
TOTAL CHARGES FOR TASK 6					$19,889

TASK 7: Solicit and Select A/E for Design Phase

LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	40	$2,543
	Sr. Project Manager	Keith Tate	$57.10	100	$5,710
	Project Manager	Robert Smith	$45.33	200	$9,066
	Project Engineer	Tarsem Thohan	$39.61	80	$3,169
	Engineering Tech.	Chris Norris	$33.49	40	$1,340
	Program Admin.	Pamela McDonagh	$39.65	80	$3,172
	Secretary	Marianna Breth	$24.04	80	$1,956
TOTAL LABOR					$26,956
DIRECT EXPENSES					
	Travel				$500
	Postage/Express Mail				$500
	Communications				$400
	Supplies & Materials				$1,200
TOTAL DIRECT EXPENSES					$2,600
TOTAL CHARGES FOR TASK 7					$29,556
TOTAL PROJECT BUDGET					$381,656

LABOR	Labor Catagory	Employee	Rate	Hours	Cost
	Program Director	Thomas Sprehe	$63.58	172	$10,936
	Sr. Project Manager	Keith Tate	$57.10	404	$23,068
	Project Manager	Robert Smith	$45.33	840	$38,077
	Project Engineer	Tarsem Thohan	$39.61	220	$8,714
	Project Engineer	Sepehr Baharlou	$30.69	160	$4,910
	Engineering Tech.	Chris Norris	$33.49	180	$6,028
	Public Affairs Rep.	Sonny Minnick	$29.83	80	$2,386
	Program Admin.	Pamela McDonagh	$39.65	140	$5,551
	Engineering Co-Op	Andy Wilkerson	$20.50	60	$1,230
	Engineering Co-Op	Curt Blazier	$19.18	60	$1,151
	Secretary	Marianna Breth	$24.04	204	$4,938
	Other Labor				$6,000
TOTAL LABOR					$112,991
DIRECT EXPENSES					
	MDE Consulting Services				$20,000
	Subcontracted Modeling Services				$220,000
	Consultant - Wetlands Evaluation				$10,000
	Mileage				$2,250
	Postage/Express Mail				$900
	Communications				$1,600
	Computer Processing				$1,800
	Supplies & Materials				$3,150
	Other Direct Expenses				$8,965
					$268,665
TOTAL PROJECT CHARGES					$381,656

FIGURE 2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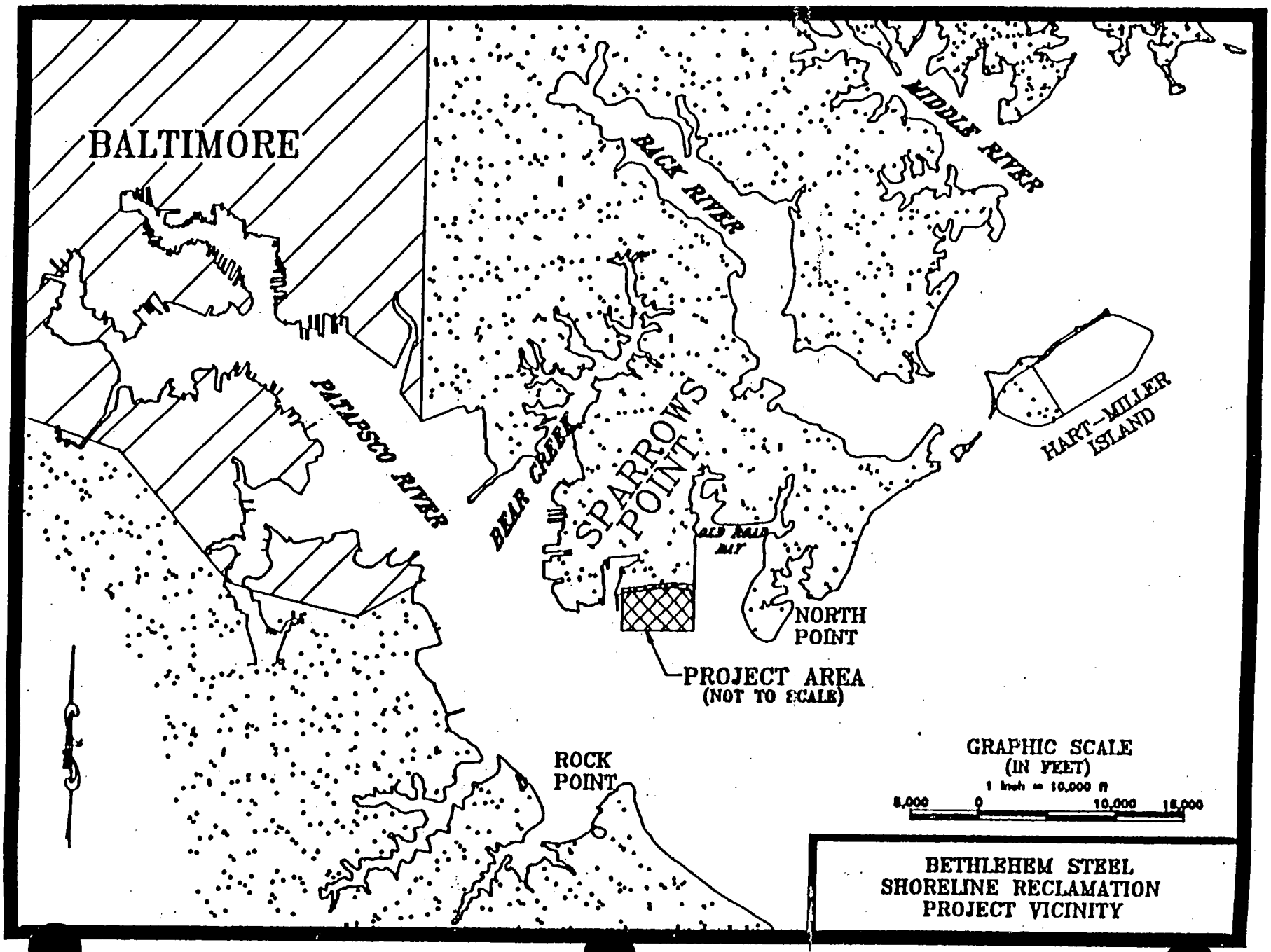
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT LOCATION MAP

FIGURE 1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8,000
0
10,000
18,000
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT VICINITY

DRAFT

BETHLEHEM STEEL SHORELINE RECLAMATION PROJECT
BRIEFING OUTLINE

Bill - Please discuss @ WE 2/16. Frank.

Governor's Task Force Recommendations (Display Report)

- partnerships
- beneficial use

Dredged Material Placement Options Program

- 20 year comprehensive plan
- matches yearly needs to specific sites
- $300 million cost (POP chart - cost summary by year)
- projects description (~~develop~~ project ~~summary~~ descriptions chart)
- Phase I Bay Enhancement
  - * immediate action beneficial use sites ~~(develop chart)~~
  - * Bethlehem Steel
- committees and work groups (POP diagram)

Shoreline Reclamation Proposal (NOAA or CADD CHARTS)

- existing condition (aerial photo)
- first beneficial use project in Bay
- 300 - 400 acres (artist's rendering/ Conceptual Sketch)
  - * 50% upland habitat/visual buffer
  - * 50% wetlands
- 10 MCY clean dredged material
- $25 million construction cost
- 10 year operational life

Status of Project

- initial assessment completed - December 1992
    * feasible and cost effective
- hydrodynamic modeling initiated (NOAA chart - Patapsco/CADD chart)
    * ensure circulation is unaffected
    * determine final size and shape

Project Support

- Bethlehem Steel Corporation
- Chesapeake Bay Foundation
- Department of Natural Resources
- Department of Environment

Public Participation (Public Participation Chart)

- community relations plan
    * elected officials
    * environmental groups
    * community groups
- develop oversight committee
    * early involvement
    * keep them informed
- public information meetings

Project Schedule (~~DOP~~ Summary schedule)

- Environmental Studies/Engineering Design	5/93 - 5/94
- Permitting	3/94 - 8/94
- Construct Retaining Structure	12/94 - 12/95
- Wetlands Development	1996 - 2006

PROJECT NAME, SAMPLING DATE AND SAMPLE LOCATIONS	EST VOLUM OF MATERIAL (1000 CY)	NUTRIENTS AND PHYSICAL PARAMETERS						METALS									
		TKN MG/KG	TOTAL P MG/KG	pH UNITS	O&G MG/KG	TOC MG/KG	TS %	ARSENIC MG/KG	BARIUM MG/KG	CADMIUM MG/KG	CHROMIUI MG/KG	COPPEI MG/KG	IRON MG/KG	LEAD MG/KG	MERCURY MG/KG	SELENIUM MG/KG	SILVER MG/KG	ZINC MG/KG
HMI AVERAGE		1854	1409	7.5	1637	29382	40.9	16.4	72	2	290	119	30254	154	0.43	7	2	295
INNER HARBOR AVERAGE		2672	1735	7.4	2901.6	42953	42.7	33.0	93.5	3.3	630.8	243.7	34756	314	0.9	11.5	2.8	415.4
INNER HARBOR MAXIMUM		15000	29000	8.8	70200	260000	98.2	540.0	739.0	21.3	6300	2200	93100	1700	6.9	320	27	1740
INNER HARBOR MINIMUM		41	56	4.1	1.2	820	16.0	0.4	11.0	0.1	7.0	4.1	1800	4	0.03	0.02	0.03	12
OUTER CHANNEL AVERAGE		1360	1223	7.62	865	22210	40.0	5.8	47	1.18	60	38	27314	48	0.117	3.87	1.00	214
OUTER CHANNEL MAXIMUM		5000	5000	8.5	5842	89000	85.2	33	92	9.70	640	240	94000	280	0.79	8.59	3.44	1010
OUTER CHANNEL MINIMUM		40	14	6.3	1	33	18.0	0.3	0.4	0.01	0.01	0.02	64.5	0.05	0.01	0.10	0.01	0.04
TOTAL VOLUME	37402.93																	
Back River Bridge	50																	
August 1985, Wet Weight																		
Section I		650	700		950	20200	50	3.6	71	3 L	640	240	14900	280	0.30	0.2	1	
Section II		430	400		1200	14500	42	0.7	40	3 L	130	120	8000	120	0.20	0.1	0.39	
Section III		310	120		74	7310	45	1	16	3 L	8	12	5400	12	0.04 L	0.1 L	0.1	
50' Project, September 1986	31862																	
CRAIGHILL ENTRANCE																		
1		1100	260	7.0	78	29000	46	0.5 L		0.32	61	15	94000	15	0.05 L			83
2		1700	250	6.7	42	33000	43	0.5 L		0.1 L	58	17	35000	18	0.05 L			81
3		280	230	8.5	38	3000	79	0.5 L		0.6	34	2.4	7800	1.8	0.05 L			12
CRAIGHILL CHANNEL																		
4		4300	48	8.3	420	58000	21	0.5 L		0.95	72	42	30000	52	0.05 L			220
5		2700	430	7.8	180	29000	30	0.5 L		0.63	79	42	32000	70	0.05 L			260
6		2700	220	8.0	320	39000	26	0.5 L		0.5	68	40	32000	54	0.05 L			240
7		2500	320	8.1	340	42000	28	0.5 L		0.57	71	41	31000	51	0.05 L			200
8		2000	240	7.4	48	27000	40	0.5 L		0.18	43	16	37000	17	0.05 L			80
9		1400	240	7.1	71	21000	42	0.5 L		0.1 L	50	14	28000	16	0.05 L			65
10		88	270	7.8	56	28000	32	0.5 L		0.2 L	61	26	33000	30	0.05 L			140
CRAIGHILL ANGLE																		
11		200	430	8.3	40 L	38000	28	0.5 L		0.6	64	33	25000	41	0.05 L			150
12		64	160	8.0	23	16000	44	0.5 L		0.38	37	23	17000	29	0.05 L			120
13		4200	920	8.1	40 L	29000	24	0.5 L		0.46	69	37	28000	52	0.05 L			210
14		160	310	7.2	40 L	38000	35	0.5 L		0.54	58	35	32000	45	0.05 L			180
15		4800	870	8.0	40 L	89000	23	0.5 L		0.48	72	40	36000	54	0.05 L			210
16		2800	470	8.0	40 L	38000	34	0.5 L		0.47	78	41	37000	55	0.05 L			220
17		3300	520	8.0	40 L	41000	23	0.5 L		0.43	78	40	35000	50	0.05 L			230
18		5000	1000	8.0	40 L	52000	22	0.5 L		0.54	85	44	43000	54	0.05 L			230
CRAIGHILL UPPER RANGE																		
19		4200	590	8.1	450	35000	22	0.5 L		0.54	60	35	28000	44	0.05 L			190
20		180	14	7.1	69	1100	74	0.5 L		0.07 L	5.3	2.2	1600	5	0.05 L			13
22		43	82	8.4	120	11000	[illegible]	0.5 L		0.17	17	7.1	6200	9.7	0.05 L			40
21		2800	500	7.9	520	13000	[illegible]	0.5 L		0.27	72	36	32000	46	0.05 L			180
23		1400	190	7.7	320	30000	[illegible]	0.5 L		0.45	45	27	20000	33	0.05 L			140
24		3000	480	8.0	510	44000	27	0.5 L		0.44	76	38	32000	52	0.05 L			200
25		1900	250	7.8	390	38000	37	0.5 L		0.32	60	33	25000	45	0.05 L			160

PROJECT NAME, SAMPLING DATE AND SAMPLE LOCATIONS	EST VOLUM OF MATERIAL (1000 CY)	NUTRIENTS AND PHYSICAL PARAMETERS						METALS										
		TKN	TOTAL P	pH	O&G	TOC	TS	ARSENIC	BARIUM	CADMIUM	CHROMIUI	COPPEI	IRON	LEAD	MERCURY	SELENIUM	SILVER	ZINC
		MG/KG	MG/KG	UNITS	MG/KG	MG/KG	%	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
26		3100	320	8.4	540	35000	28	0.5 L		0.43	80	38	30000	50	0.05 L			180
27		2700	970	6.7	520	47000	33	0.5 L		0.36	110	69	47000	90	0.05 L			340
28		3500	692	7.9	700	32000	26	0.5 L		0.61	85	42	35000	58	0.05 L			250
BREWERTON CHANNEL																		
29		2100	520	7.5	310	28000	42	0.5 L		0.48	96	45	38000	71	0.05 L			30
30		3300	1100	8.2	760	48000	23	0.5 L		0.69	90	43	37000	62	0.05 L			210
31		2300	450	8.0	40 L	26000	33	0.5 L		0.78	120	43	37000	81	0.05 L			330
32		2400	300	7.1	40 L	38000	36	0.5 L		1	110	91	43000	25	0.05 L			320
33		3100	970	7.2	40 L	61000	30	0.5 L		0.8	130	54	51000	100	0.05 L			350
34		3200	610	8.1	40 L	89000	23	0.5 L		0.65	160	61	49000	82	0.05 L			250
35		3400	820	8.1	100	38000	22	0.5 L		1	180	71	48000	100	0.05 L			33
36		4300	1100	8.0	71	59000	[redacted]	0.5 L	[redacted]	0.76	220	76	45000	98	0.05 L			310
BREWERTON ANGLE																		
37		2900	25	8.0	40 L	29000		0.5 L		0.82	150	69	38000	67	0.05 L			240
38		4300	1300	8.0	110	53000	22	0.5 L		0.45	240	71	49000	87	0.05 L			300
39		4900	1100	7.7	60 L	60000	18	0.5 L		1.5	390	71	59000	140	0.05 L			410
40		2400	590	7.8	110	41000	32	0.5 L		1.5	360	120	46000	160	0.05 L			450
CSX Import Ore Pier September 1987	49.43	400	100	6.8	200	33		0.3	0.4	0.01	0.01 L	0.02	64.5	0.05 L	0.01	1 L	0.01 L	0.04
Baltimore Gas & Electric, Sept. 1988	18																	
Wagner Point		1900	1900	7.1	2200	21700	68	12	30 L	0.7 L	120	81	30000	47	0.13	3.1	0.7 L	170
Brandon Shores		1300	600	7.7	500	7700	37	16	50 L	5 L	130	68	38000	49	0.16	3.3	1 L	200
Seagirt Marine Terminal, May 1987	44	2900	1000	6.4	2500	29000	38	12	55	6.3	170	95	39000	97	0.37	1	0.26	210
Brewerton/Tolchester, March 1989																		
Core # 11		1200	3000	7.7	400	30600	41	10	50 L	2	32	30	34800	37	0.10 L	5 L	1 L	172
Core # 12		1100	2200	7.5	400	39300	41.7	10	50	2	32	45	37600	55	0.10	5 L	1 L	280
Core # 13		1000	4200	7.8	600	39300	39.1	20	50	1 L	40	64	38300	89	0.10	5 L	1 L	429
Core # 14		1100	2000	7.6	500	42300	38.9	20	60	1 L	40	63	39100	86	0.10	5 L	1 L	406
Core # 15		1100	3400	8.1	500	36800	37.6	20	60	1 L	40	63	39900	84	0.10	5 L	1 L	401
Core # 16		970	3700	7.6	300	34600	34.9	20	60	1 L	44	57	40800	75	0.10	5 L	1 L	367
Core # 17		1000	3000	7.4	300	34200	35.1	10	70	1 L	36	52	39000	64	0.10	5 L	1 L	336
Core # 18		1400	3800	7.1	700	32500	35.6	10	60	1 L	34	48	37700	63	0.10	5 L	1 L	304
Core # 19		1200	3000	7.5	600	36100	37.1	20	60	1 L	39	55	39800	70	0.10	5 L	1 L	358
Core # 21		1100	4500	7.3	1400	40600	41.7	10	60	2	34	52	34800	62	0.10	5 L	1 L	324
Core # 22		1200	2700	7.5	1400	39900	43.4	10	60	1 L	31	46	35600	56	0.10	5 L	1 L	265
Core # 24		1200	5000	7.2	1200	43200	43.2	10	60	1 L	32	48	35600	57	0.10	5 L	1 L	276
Core # 26		1000	2500	7.6	500	40000	44.5	10	50	5	30	45	34100	54	0.10	5 L	1 L	256
Grab # 1		790	3300	7.1	400	29900	44.9	10	50 L	1 L	39	36	34100	55	0.10	5 L	1 L	271
Grab # 2		980	1200	7.5	400	27900	33.9	10	50 L	4	48	44	33000	64	0.10	5 L	1 L	288
Grab # 3		1000	4800	6.3	400	32700	[redacted]	20	50	1 L	58	56	40300	86	0.10	5 L	1 L	398
Grab # 4		830	2000	7.9	1500	26800	[redacted]	10	50	1 L	42	42	32700	60	0.10	5 L	1 L	290
Grab # 5		780	2900	7.8	900	29400	[redacted]	10	80	1 L	45	49	40000	66	0.10	5 L	1 L	319
Grab # 6		840	3500	7.8	1000	21700	32.5	10	60	1 L	40	45	35800	60	0.10	5 L	1 L	303
Grab # 7		1100	4100	7.0	800	30200	30	20	70	1 L	40	44	35600	62	0.10	5 L	1 L	309

PROJECT NAME, SAMPLING DATE AND SAMPLE LOCATIONS	EST VOLUM OF MATERIAL (1000 CY)	NUTRIENTS AND PHYSICAL PARAMETERS						METALS									
		TKN	TOTAL P	pH	O&G	TOC	TS	ARSENIC	BARIUM	CADMIUM	CHROMIUI	COPPEI	IRON	LEAD	MERCURY	SELENIUM	SILVER	ZINC
		MG/KG	MG/KG	UNITS	MG/KG	MG/KG	%	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Grab # 8		1100	3800	7.8	300	28400	31.1	10	60	1 L	38	44	34000	57	0.10	5 L	1 L	275
Grab # 9		980	4300	7.6	600	31100	31.3	10	70	1 L	39	41	38200	59	0.10 L	5 L	1 L	276
Grab # 10		1700	4600	7.9	400	27300	28.8	10	60	1 L	36	40	34200	58	0.10 L	5 L	1 L	272
Grab # 20		1200	4500	8.1	400	29700	30.9	10	50	1 L	30	39	30600	44	0.10 L	5 L	1 L	228
Grab # 23		40	4100	6.9	700	40900	41.9	20	50	1 L	30	55	34800	63	0.10 L	5 L	1 L	304
Grab # 25		960	1600	7.9	800	43100	33.3	10	50	1 L	37	40	32900	44	0.10 L	5 L	1 L	233
CSX – Stonehouse Cove, September 1988		379	612	7.2	2485	26743	58.6	13.8	51.3	9.7	69	96.3	37462	102.7	0.79	6.7	0.6	468
Craighill Channel, July 1989	1600																	
VC-1-TOP		2543	1512		5842	8591	29.1	4.5		1.7 L	41.2	17.2	31271	61.9	0.34	8.6 L	3.4 L	337
VC-1-MIDDLE		484	833		4301	2366	[redacted]											
VC-1-BOTTOM		304	179		1038	1038												
VC-2-TOP		932	932		2564	2564	4[redacted]	3.5		1.2 L	32.6	12.8	8578	55.9	0.23	5.8 L	1.2 L	322
VC-2-MIDDLE		597	764		2387	2076	41.9											
VC-2-BOTTOM		1072	992		2440	3217	37.3											
VC-3-TOP		1307	235		3183	1323	59.7	4.7		0.8 L	7.5	10.1	15745	13.4	0.17	4.2 L	0.8 L	37
VC-3-MIDDLE		409	288		3125	1034	41.6											
VC-3-BOTTOM		1133	939		3039	3039	36.2											
VC-4-TOP		966	757		3655	3133	38.3	5.0		1.3 L	26.1	15.7	29765	44.4	0.26	6.5 L	1.3 L	196
VC-4-MIDDLE		439	537		4634	1756	41											
VC-4-BOTTOM		485	306		3827	1837	39.2											
VC-5-TOP		725	828		2692	2692	48.3	2.7		1.0 L	31.1	13.5	16977	33.1	0.21 L	5.2 L	1.0 L	178
VC-5-MIDDLE		1133	1076		3399	4249	35.3											
VC-5-BOTTOM		272	298		440	1192	77.2											
VC-6-TOP		1709	1317		3922	4762	35.7	6.2		1.4 L	53.2	23.8	9804	64.4	0.28	7.0 L	1.4 L	305
VC-6-MIDDLE		1078	727		3509	2757	39.9											
VC-6-BOTTOM		878	653		2928	2703	44.4											
C-10		609	1445		655	11738	44.3	4.7		1.1 L	24.8	15.8	19639	36.1	0.23	5.6 L	1.1 L	172
C-11		864	815		741	6667	40.5	3.5		1.2 L	24.7	12.3	24321	29.6	0.25	6.2 L	1.2 L	143
C-13		418	505		505	2857	45.5	4.8		1.1 L	16.5	12.1	27473	17.6	0.22 L	5.5 L	1.1 L	55
C-14		103	164		29	176	85.2	1.5		0.6 L	14.1	2.9	5423	1.8	0.06	0.6 L	0.6 L	8
C-15		665	421		510	5543	45.1	5.3		1.1 L	10.0	14.4	28381	17.7	0.22 L	5.5 L	1.1 L	53
C-16		233	202		187	2022	64.3	7.8		0.8 L	23.3	10.9	26827	10.1	0.08 L	0.8 L	0.8 L	47
C-17		461	346		202	2305	69.4	14.4		0.7 L	34.6	15.9	24424	13.7	0.07 L	0.7 L	0.7 L	58
C-18		593	256		229	1348	74.2	6.7		0.7 L	16.2	6.1	13005	4.7	0.07 L	0.7 L	0.7 L	24
C-19		300	240		288	637	83.2	3.1		0.6 L	4.8	7.2	6611	7.2	0.12	3.0 L	0.6 L	16
C-20		581	839		710	3871	46.5	1.1 L		1.1 L	10.8	5.4	17204	21.5	0.22	5.4 L	1.1 L	90
C-23		184	368		1034	2759	43.5	4.8		1.1 L	9.2	14.9	15200	17.2	0.23 L	5.7 L	1.1 L	64
C-26		305	266		279	1992	75.3	1.2		0.7 L	6.6	7.3	6972	3.3	0.13 L	0.7 L	0.7 L	19
C-27		503	395		354	1905	73.5	1.6		0.7 L	10.9	8.2	7211	10.2	0.14 L	3.4 L	0.7 L	46
C-28		700	2045		700	11204	35.7	2.0		1.4 L	50.4	14.0	28291	58.8	0.28 L	7.0 L	1.4 L	280
C-29		104	816		454	3175	44.1	1.1 L		1.1 L	21.5	6.8	20975	27.2	0.23	5.7 L	1.1 L	145
C-31		374	857		747	3956	45.5	4.0		1.1 L	16.5	17.6	8050	39.6	0.22 L	5.5 L	1.1 L	132
Baltimore County Projects, March 1989	65						[redacted]											
North Point Cove, Lynch Point Creek, Muddy Gut & Tabasco Cove																		
NP-1		950	800	7.9	900		51.7	10 L	50 L	1 L	28	37	22700		0.40	5 L	1 L	226

PROJECT NAME, SAMPLING DATE AND SAMPLE LOCATIONS	EST VOLUM OF MATERIAL (1000 CY)	NUTRIENTS AND PHYSICAL PARAMETERS						METALS									
		TKN	TOTAL P	pH	O&G	TOC	TS	ARSENIC	BARIUM	CADMIUM	CHROMIU	COPPEI	IRON	LEAD	MERCURY	SELENIUM	SILVER	ZINC
		MG/KG	MG/KG	UNITS	MG/KG	MG/KG	%	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
NP-2		1100	4100	8.0	1000		43.2	10	50 L	1 L	55	70	29700		0.30	5 L	1 L	610
NP-3		1100	1500	7.9	700		42.6	10	50 L	2	46	65	28200		0.20	5 L	1 L	580
NP-4		810	3500	7.8	1200		48.6	10	50 L	2	69	77	29300		0.30	5 L	1 L	1010
NP-5		820	2100	7.8	1100		57.4	10	50 L	1 L	28	34	17000		0.20	5 L	1 L	310
TC-1		1100	1200	7.6	1100		42.3	10	60	2	39	57	28000		0.30	5 L	1 L	550
TC-2		1100	1500	7.7	1200		48.2	10	60	2	53	53	25800		0.30	5 L	1 L	710
TC-3		1000	870	7.5	1500		47	10	60	2	33	55	30200		0.20	5 L	1 L	630
MG-1		870	1500	7.3	900		57.9	10 L	50 L	1 L	14	13	15500		0.10	5 L	1 L	57
MG-2		2500	2000	7.4	1400		40.7	10 L	50 L	1 L	24	22	34600		0.10 L	5 L	1 L	86
MG-3		1100	3000	7.1	1100		34.5	10	50 L	1 L	22	20	34700		0.10 L	5 L	1 L	80
LP-1		920	350	7.9	1200		[illegible]	10 L	50 L	1 L	8	11	5690		0.10	5 L	1 L	43
LP-2		1300	1700	7.2	1900		[illegible]	10 [illegible]	90	3	118	110	32100		0.20	5 L	3	500
Brewerton Eastern Extension	1950																	
March 1991																		
GRAB SAMPLE 1		910	460	7.5	210	6300	30	3	5 L	1 L	14	14	12000	21	0.08	1 L	1 L	82
GRAB SAMPLE 2		1100	590	7.2	130	11000	26.5	3	10 L	1 L	12	13	8800	13	0.09	1 L	1 L	78
GRAB SAMPLE 3		940	560	7.4	69	10000	26.3	3	10 L	1 L	15	14	8700	14	0.08	1 L	1 L	82
GRAB SAMPLE 4		880	410	7.4	240	8400	26.4	33	17	1 L	9	12	8300	15	0.07	1 L	1 L	66
GRAB SAMPLE 5		1200	510	7.7	330	7600	25.8	3	10 L	1 L	9.9	12	9100	18	0.05 L	1 L	1 L	67
GRAB SAMPLE 6		870	460	6.9	170	9400	22.2	2	39	1 L	8.1	11	8000	13	0.05 L	1 L	1 L	59
CORE SAMPLE 1		880	590	7.8	240	6400	37.9	5.2	24	1 L	21	20	13000	27	0.01 L	1 L	1 L	130
CORE SAMPLE 2		890	540	7.7	350	10000	38.2	4.7	69	1 L	21	20	13000	32	0.06	1 L	1 L	120
CORE SAMPLE 3		790	270	8.2	200	4700	40.7	2.8	92	1 L	11	6.9	14000	10	0.05 L	1 L	1 L	36
CORE SAMPLE 4		790	380	6.9	280	7900	43.4	3.3	15	1 L	8.9	16	13000	13	0.04	1 L	1 L	60
CORE SAMPLE 5		690	360	7.9	1 L	5800	44.4	3	17	1 L	13	8.5	14000	8	0.06	1 L	1 L	43
Tolchester Channel																		
March 1991																		
GRAB SAMPLE 1		206	104	7.9	72	2310	23.1	1	5	1 L	1.9	2.3	1709	2.1	0.01	1 L	1 L	12
GRAB SAMPLE 2		328	208	7.6	97	2312	33.5	1.3	25	1 L	4.7	6.4	4020	9.0	0.01	1 L	1 L	37
CORE SAMPLE 1		398	173	7.5	113	3287	33.2	1.6	26	1.000 l	5.0	6.6	3984	11.0	0.03	1 L	1 L	33
CORE SAMPLE 2		150	150	7.3	104	2148	35.8	1.4	18	1 L	3.9	5.4	3938	6.4	0.13	1 L	1 L	30
FT MCHENRY CHANNEL																		
41		3000	480	8.1	40 L	43000	25	0.5 L		1.3	320	74	48000	110	0.05 L			370
42		3300	850	7.2	40 L	51000	26			1.1	240	84	46000	100				310
CURTIS BAY CHANNEL																		
43		3900	2300	7.6	60 L	110000	17	0.5 L		2.9	570	180	92000	220	0.05 L			640
44		290	1600	8.4	50 L	83000	19	0.5 L		1.5	290	96	46000	110	0.05 L			320
45		5300	1200	8.2	60 L	93000	18	0.5 L		1.6	340	140	46000	130	0.05 L			350
46		4500	950	8.0	50 L	96000	20	0.5 L		1.5	480	170	40000	160	0.05 L			320
47		3100	890	8.4	160	63000	[illegible]	0.5 L		1.1	240	140	44000	130	0.05 L			280
48		4700	1300	8.1	190	110000	[illegible]	0.5 [illegible]		2	300	190	52000	170	0.05 L			410
49		2500	240	6.5	78	40000	[illegible]	0.5 [illegible]		0.38	48	24	25000	13	0.05 L			58
50		1800	770	8.1	97	20000	[illegible]	0.5 L		0.71	130	78	44000	89	0.05 L			160
Dundalk/Seagirt Marine Terminal	44																	

PROJECT NAME, SAMPLING DATE AND SAMPLE LOCATIONS	EST VOLUM OF MATERIAL (1000 CY)	NUTRIENTS AND PHYSICAL PARAMETERS						METALS									
		TKN	TOTAL P	pH	O&G	TOC	TS	ARSENIC	BARIUM	CADMIUM	CHROMIU	COPPEI	IRON	LEAD	MERCURY	SELENIUM	SILVER	ZINC
		MG/KG	MG/KG	UNITS	MG/KG	MG/KG	%	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
September 1986																		
C1		280	105	7.5	680	26200	40	17	19	2.06	48	31	8000	37	0.11	0.31	0.13	104
C2		400	64	7.5	490	820	86	0.35	12	0.6	7	4.1	2500	10	0.07 L	0.02 L	0.03	12
C3		260	56	7.0	460	17300	51	4.4	37	2.5	17	9.2	10000	12	0.05 L	0.05	0.05	47
CC1-3		510	440	7.7	4000	34000	41	31	67	21.3	180	170	9400	150	0.49	1.9	0.64	420
CG3&4		270	140	7.5	690	18500	42	7.4	21	2.1	44	28	8200	36	0.12	0.28	0.1	97
Pier 4, October 1986	14																	
Site A Dry Weight		4300	2300		100 L	26000	20.8	62	100	5	2700	550	52000	600	1.90	9.7	9	1000
Site B "		2700	1700		100 L	1600	29.2	63	540	6	1900	850	47000	1700	1.50	8.3	6	930
Amstar Sugar, 1987	31																	
1A,1B,1C Dry Weight		2900	1600	6.7	560	150000	[redacted]	44	100	4	1500	440	36000	350	1.60	9.2	2	660
MD Ship & Drydock, March 1987	50																	
1 Dry weight		60		7.3	880	6400	[redacted]	11	35	18	77	70	12000	30	0.03	0.5	0.3	100
2 "		41		7.3	1400	8500	45	10	36	2	61	120	11000	53	0.03	0.32	0.26	200
Sparrows Point Shipyard, April 1987	400																	
Wet Weight		320	310	6.9	220	8500	38	10	18	1.2	33	14	24000	24	0.06	0.14	0.13	110
50' Utility Relocation, May 1987	54	2900	1000	6.4	2500	29000	38	12	55	6.3	170	95	39000	97	0.37	1	0.26	210
Canton Waterfront Park, Feb. 1988	2.5																	
Dry Weight		2900	1000	6.4	2500	29000	38	12	55	6.3	170	95	39000	97	0.37	1	0.26	210
B-4,B-11, Dry Weight		3100	630	7.5	18000	260000	42	22	100	5.3	260	580	15600	450	1.00	0.5	1 L	430
Eastalco Aluminum Co., July 1988	299																	
Section I		4100	2900	6.8	4200	27400	22	37	90 L	2	410	180	80700	180	1.00	2	2 L	588
Section II		7200	3100	6.9	3000	30000	24	39	80 L	3	402	180	84600	180	1.10	2 L	2	616
Locust Point Marine Terminal	2.5																	
MPA, June 1988		3500	2200		2800	27400	28.2	32	70 L	4	210	217	44600	168	0.80	0.9	2	481
MPA Small Boat Facility	1																	
Oct. 1986		1500	1600	6.9	1900	41000	59.3	29	120	2	550	300	47000	170	0.52	12	0.9	320
Fleet St./Falls Ave., Nov. 1988																		
Jones Falls Waterway	41																	
Stiles & Pratt Sts., Nov. 1988																		
IIA, S. of Pratt St., Dec. 1988																		
IIB, S. of Fleet St., Dec. 1988																		
1A - Jones Falls Streambed		400	1100		100 L	22000	[redacted]	3.2	30 L	1	55	56	19000	360	0.14	0.3 L	0.6	140
1B - Jones Falls Streambed		600	500		600	25000		3.6	60	3	64	34	17000	240	0.10	0.3 L	5	150
2A - Jones Falls Streambed		100	300				[redacted]	1.3	20 L	0.5	13	14	7100	32	0.20 L	0.2 L	0.5 L	29
2B - Jones Falls Streambed		400				46000	84.7	2.8	30 L	0.6	40	28	14000	240	0.04	0.3 L	0.6 L	160

PROJECT NAME, SAMPLING DATE AND SAMPLE LOCATIONS	EST VOLUM OF MATERIAL (1000 CY)	NUTRIENTS AND PHYSICAL PARAMETERS						METALS									
		TKN	TOTAL P	pH	O&G	TOC	TS	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON	LEAD	MERCURY	SELENIUM	SILVER	ZINC
		MG/KG	MG/KG	UNITS	MG/KG	MG/KG	%	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Eastalco – MES Sample, Jan. 1989		900	2600	8.0	1700		31.2	30	60	1 L	203	131	40200	144	0.10 L	5 L	5 L	391
CCSC Baltimore Terminal, March 1988	251																	
1A, 1B, 1C Composite	13	450	480	7.8	550	7300	62.1	8.4	50	1.1	15	39	9800	48	0.89	0.1	0.05 L	130
2A, 2B, 2C Composite		930	220	5.5	390	6900	66.8	1.6	53	1.9	22	22	7800	4 L	0.65	0.1 L	0.05 L	52
Brewerton Channel, July 1989																		
B–8, B–12 Composite		837	206		543	1629	44.2	7	16	1 L	79	50	48643	24	0.23	0.5 L	0.1 L	231
Curtis Bay Co.–Bayside Terminal	62																	
November 1987																		
B1–B1A		100	200	6.8	1600	1000 L		3.4	20 L	0.7 L	13	20	6200	20	0.06 L	0.2 L	0.7 L	37
B2–B2A		1000	400	7.2	1900	76000		15	59	0.7 L	44	78	18000	140	0.35	1	0.7	210
(B2–B2A CONTINUED)																		
B3		700	600	7.9	900	67000	77.6	9.8	58	0.7 L	38	69	14000	130	0.32	1	0.7	190
Allied Signal, January 1990	142																	
MR–204X(Upper)	5.75	1800	300	7.1	6600	32000	56.2	12	180	3	2600	300	24000	1200	0.91	0.9	18	830
MR–204X(Lower)	5.75	3400	500	8.2	6200	48000	50.7	540	380	6	4200	320	62000	1600	4.20	2.6	4	1200
MR–209X(Upper)	12	3300	2700	8.2	2300	41000	35	59	200	8	6000	670	54000	790	2.40	5.4	8	1200
MR–209X(Lower)	12	2300	2200	7.7	2400	46000	37.5	72	200	8	6300	680	53000	790	3.70	6.7	10	1300
MR–214X(Upper)	19.25	1300	2200	7.2	1400	36000	41.8	120	380	5	1800	770	55000	1000	5.00	19	5	1700
MR–214X(Lower)	19.25	1300	400	7.2	1400	27000	55	10	100	2 L	240	76	31000	420	1.20	1 L	2 L	270
MR–218X(Upper)	31.75	400	2700	7.6	2800	41000	43.7	92	100 L	10	3600	1000	56000	710	3.30	13	6	1500
MR–218X(Lower)	31.75	1200	700	7.5	2500	26000	54.7	60	100	6	2000	480	27000	600	2.90	9	4.8	900
Inner Harbor East Marina July, 1990	28	700	400	7.1	2500	40200	31	8.7	60 L	2	520	150	27000	300	0.52	2	3	450
Lady Maryland Ship Station																		
September 1990																		
1A		960	580	7.5	3000			8.3	67	3	2100	120	7000	370	0.62	1 L	8	380
1B		1300	580	7.4	3600			16	140	4.1	2200	130	8700	540	1.10	12	1 L	510
Sparrows Point Turning Basin																		
June 1987		6700	23000	8.8	650	12000	52	1.4	18	2.2	38	46	14000	52	0.05 L	0.19	0.33	230
Dundalk Marine Terminal	131																	
March 1991																		
A		1319	911	6.9	226	79710	41.4	49.3	739	4.83	241	203	35556	1347	0.48	0.25 L	1.5 L	560
B		1015	535	7.7	261.5	97292	51.7	26.4	158	3.87	126	923	29284	58	0.35	0.25 L	1.5 L	306
C		910.4	287	7.6	181.3	50104	52.9	13	37.8	2.84	210	63.1	27788	51	0.40	0.25 L	1.5 L	261
D		708.7	3976	7.8	112	53162	50.6	16.4	37.5	1 L	118	39.7	27569	10 L	0.05 L	0.25 L	1.5 L	178
Pier 5 & 6 Inner Harbor Sediments	16																	
August 27, 1984																		
NORTH		15000	751		11000	25400		61	84	8.4	1090	534	47400	845	6.30	7.6	2.33	

PROJECT NAME, SAMPLING DATE AND SAMPLE LOCATIONS	EST VOLUM OF MATERIAL (1000 CY)	NUTRIENTS AND PHYSICAL PARAMETERS						METALS									
		TKN	TOTAL P	pH	O&G	TOC	TS	ARSENIC	BARIUM	CADMIUM	CHROMIU	COPPEI	IRON	LEAD	MERCURY	SELENIUM	SILVER	ZINC
		MG/KG	MG/KG	UNITS	MG/KG	MG/KG	%	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
CENTER		9510	370		5840	15800	45.2	54	43	2.4	354	351	32500	414	6.90	8.5	0.67	
SOUTH		14600	29000		11800	29000	33	54	103	8.5	1500	546	45900	756	5.00	13.0	0.74	
Amerada Hess Curtis Creek Terminal February 9. 1993 Dry weight	15	600	700	7.3	1000	34000	22.4	15	26	1	86	85	20000	75	0.35	1.6	0.6 L	170
SUE CREEK AREA																		
SC-1A		2300	730	8.0	200		32.1	1.1	36	2	38	60	52300		0.10 L	1 L	1 L	237
SC-2A		1600	1200	8.3	100		36.8	1 L	24	1 L	21	24	40800		0.10 L	1 L	1 L	77
SC-3A		1500	950	8.2	200		35.7	9	26	1 L	24	38	45000		0.10 L	1 L	1 L	133
SC-3A		1000	380	8.2	200		45.3	2.3	20	1 L	19	23	37800		0.10 L	1 L	1 L	86
SC-6A		1400	960	8.2	200		32.8	3.1	32	1 L	32	49	47700		0.10 L	1 L	1 L	178
SC-2B		1500	430	8.1	200		37.8	2.2	30	1 L	26	36	40500		0.10 L	1 L	1 L	145
SC-3B		2300	190	8.0	300		45.5	1 L	11	1 L	14	15	29500		0.10 L	1 L	1 L	52
SC-6C		1500	1200	7.8	200		32.3	5.1	32	1 L	33	63	43000		0.10 L	1 L	1 L	231
UPPER BEAR CREEK AREA																		
SC-1 1ST 3PGS DATA MISSING		1700	1300	7.9	1800								22800		0.20	5 L	1 L	560
SC-2		860	1600	7.7	2100			8	46	2	22	38	19900		0.10 L	5 L	1 L	357
GREENHILL COVE AREA																		
GH-1		1600	1300	7.2	1700			1	56	2	50	58	28500		0.30	5 L	2	239
GH-2		2500	1300	7.4	1100			1	57	1 L	57	56	31200		0.10	5 L	2	252
SPARROWS POINT SHIPYARD DECEMBER 14, 1993	30																	
SP-1 ACCESS CHANNEL		11200	2270	7.8	850	27800		30.6	64.4	2.8	168	68.4	43100	113	0.49	2.2	0.63 L	296

PROJECT NAME, SAMPLING DATE AND SAMPLE LOCATIONS	EST VOLUM OF MATERIAL (1000 CY)	NUTRIENTS AND PHYSICAL PARAMETERS						METALS									
		TKN	TOTAL P	pH	O&G	TOC	TS	ARSENIC	BARIUM	CADMIUM	CHROMIU	COPPEI	IRON	LEAD	MERCURY	SELENIUM	SILVER	ZINC
		MG/KG	MG/KG	UNITS	MG/KG	MG/KG	%	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
SP-2 PIER 1/PIER 3		12500	4410	8.2	70200	68700		48.4	114	8.4	677	286	93100	317	1.00	4.4	0.62 L	1230
SP-3 GRAVING DOCK		10600	4940	7.9	4810	42900		62	85.1	9.5	716	232	91200	409	1.90	7.4	0.52 L	1740
SEAGIRT MARINE TERMINAL, 3/23/93																		
SP-1 upper elevation 16'+		3000	290	4.1	1900	7300		20	70	0.98 L	87	100	18000	84	0.57	3.1	0.98 L	96
SP-2 middle elevation 13-16'		2200	320	5.9	2700	6400		36	130	0.99 L	150	130	21000	120	0.32	5.2	0.99 L	250
SP-3 lower elevation 10-13'		2100	280	6.1	1700	5700		17	53	0.94 L	79	80	1800	63	0.33	3.2	0.94 L	110
AT&T COMPOSITE A,B,C 1993		1400	330	7.8	1.2	22000			31	0.1	53	100	42000	31	0.16	1 L	1 L	130
CLINTON STREET, PIER 1																		
Keystone Ship Berthing,Inc. Wharfside Channel: A		5900	500	7.2	1800	30000	20.4	78	180	4	730	1100	48000	460	1.20	98	13	690
Keystone Ship Berthing,Inc. Wharfside Channel: B		3700	600	7.2	4800	61000	27.3	110	150	6	920	1600	44000	800	1.90	180	20	840
Keystone Ship Berthing,Inc. Wharfside Channel: C		2400	700	7.1	9400	83000	41.9	340	130	4	1000	2200	34000	980	2.60	320	27	630
VANE BROTHERS, PIER 12																		
Station 1				6.9	2940						68.3			77.3				173
Station 2				7.2	5910						242			289				1060
Station 3				7.4	4790						110			235				573
Station 4				7.5	1370						44.7			69.5				277
Hart-Miller Island D.M.C.F.																		
Dike Raising Material, May 1988																		
Sta 203+50 #1		340	39	8.7	370	15000	86	4	50 L	1 L	15	18	9400	15	0.10	2 L	1 L	32
Sta 203+50 #2		350	33	5.4	300	12000	83	2	50 L	1 L	1 L	5	6420	2 L	0.10 L	2 L	1 L	17
Hart-Miller Island D.M.C.F.																		
Dike Raising Material, Oct. 1988 Sta 182		110	232	6.5	0.04		86.2	10 L	50 L	1 L	11	22	7100	22	0.10 L	0.5 L	1 L	54
DT-1		868	1396		528	9434	26.5	11.3		1.9 L	35.8	37.7	31509	52.8	0.38	9.4 L	1.9 L	234
DT-2		906	2520		1969	16929	25.4	5.1		2.0 L	25.6	19.7	20866	43.3	0.39	9.8 L	2.0 L	213
DT-3		1619	4333		2810	18095	21	9.0		2.4 L	38.1	33.3	33571	66.7	0.48	11.9 L	2.4 L	286
DT-4		1318	4318		5000	23636	22	3.2		2.3 L	22.7	15.9	19318	34.1	0.45	11.4 L	2.3 L	173
DT-5		1639	2418		3648	23770	24.4	5.7		2.0 L	28.7	24.6	27459	49.2	0.41	10.2 L	2.0 L	221
DT-6		756	756		2493	7843	35.7	5.3		1.4 L	11.2	16.8	27031	18.2	0.28	7.0 L	1.4 L	53
DT-7		1209	3150		549	16484	27.3	6.6		1.8 L	29.3	29.3	28205	51.3	0.37	9.2 L	1.8 L	220
DT-8		1131	1651		291	11315	32.7	4.0		1.5 L	18.3	15.3	16820	22.9	0.31	7.6 L	1.5 L	86
DT-9		1190	3048		929	22305	26.9	6.7		1.9 L	33.5	26.0	29368	52.0	0.37	9.3 L	1.9 L	223
DT-10		1472	2415		792	18868	26.5	3.4		1.9 L	24.5	13.2	21509	45.3	0.38	9.4 L	1.9 L	219
MR-202AX(Upper)	0	600	100	11.4	2300	18000	41.5	13	100 L	2	36000	100	82000	240	0.55	1 L	2	550
MR-202AX(Lower)	0	7400	1200	10.9	2100	26000	54.8	130	100	2	18000	160	38000	520	2	4	2	620

****** D R A F T ******

MARYLAND PORT ADMINISTRATION
Inter-Office Memorandum

March 26, 1993

TO: Don Krach

FROM: Frank Hamons

SUBJECT: Bethlehem Steel Shoreline Reclamation Project

This is in response to our conversation on March 25, 1993 requesting a legal opinion in response to State Senator Norman Stone, Members of the House of Delegates and the Baltimore County Delegation concerns relating to the MPA's proposed Bethlehem Steel Shoreline Reclamation Project.

Their concerns were founded on two major factors: The Hart-Miller Island five mile radius which prohibits the location of a placement site within five miles of Hart-Miller Island and the construction of a containment facility within the same radius. We have scheduled the award of an environmental and engineering feasibility design study during May, 1993. The study cost is estimated to be 2 million.

In addition, MPA has other proposed sites within Hart-Miller Island five mile radius but are located in different counties. Pooles Island is an Army Reservation location in Harford County. The other site north of Bokins Creek in the Patapsco River is in Anne Arundel County. We have been informed that Sean Coleman, Esq. from MES is also reviewing the Hart-Miller 5 Mile Rule as well.

Your timely response to the interpretation of this law is appreciated.

FLH/WJL:lmc:STEEL.DFT

4623 4982

333.1126

GENERIC LETTER OF ANNOUNCEMENT
COMMUNITY RELATIONS PLAN
BETHLEHEM STEEL SHORELINE RECLAMATION PROJECT

Dear Interested Party:

In the near future, public announcement will be made of an exciting new shoreline beautification project which will be proposed utilizing clean dredged material to create a significant wildlife habitat. The Bethlehem Steel Shoreline Reclamation Project will create hundreds of acres of aquatic, intertidal wetland, and upland habitat at the same time provide beneficial use of material dredged taken from our navigation channels, ever so key to the vitality of our Port.

As a leader in your community I would like to take this opportunity to advance you factual information regarding this important project. We want to work in partnership with the community in creating the first beneficial dredged material placement project. We recognize the need to inform the public about the project and solicit their input in the development process. What we learn in this first project will benefit subsequent beneficial use projects.

Please take a few moments to review the attached fact sheet. An MPA representative will be contacting you in the near future to arrange an informal briefing with you at your convenience. In the meantime should you have any questions or concerns please do not hesitate to call Mr. Frank Hamons of my staff at 631-1102 or Mr. Keith Tate of the Maryland Environmental Service at 974-7254.

Thank you for your interest in the health of the Port of Baltimore and its regional environment.

Sincerely,

BETHLEHEM STEEL SHORELINE RECLAMATION
FACT SHEET

I. BACKGROUND

Governor William Donald Schaefer's Task Force on Dredged Material Management (February 1991) report has recommended emphasis on beneficial uses of dredged material and development of an active and creative partnership of all parties concerned with dredge material management.

The Maryland Port Administration (MPA) is responsible to implement Task Force's recommendations. MPA with the assistance of the Maryland Environmental Service (MES) has developed a concept with Bethlehem Steel Corporation (BSC) to environmentally enhance a portion of shoreline and adjacent waters at BSC's Sparrows Point Facility using clean dredged material to construct wetland and upland habitat.

II. PROJECT DESCRIPTION

The project site is located at Bethlehem Steel's Sparrows Point Facility on the Patapsco River, as shown in Figure 1. The site is comprised of a portion of the Sparrows Point property and the adjacent waters. The property is currently used by Bethlehem Steel to stockpile ore for their manufacturing processes.

The project involves creating several hundred acres of wetlands using materials dredged from the approach channels to Baltimore Harbor. These wetlands will help stablize the shoreline, provide habitat for wildlife, and provide general beautification of the shoreline.

III. AGENCIES SUPPORTING THE PROJECT

The Maryland Port Administration will provide funds for environmental studies, engineering and design, and construction and maintenance. The Bethlehem Steel Corporation will provide necessary lands, easements and rights of way for the project. Key design input will be provided by the Maryland Departments of the Environment and Natural Resources. The U. S. Fish and Wildlife Service, National Marine Fisheries, Army Corps of Engineers and the Chesapeake Bay Foundation also will be providing input to the project.

The MES will manage the technical components of the project for the MPA as well as assist with the overall project administration.

IV. PUBLIC INVOLVEMENT

Briefings will be conducted early in the Project with local elected officials, community leaders and environmental interest groups to inform them about the Project. Meetings also will be conducted to address concerns from the general public. These meetings will be held throughout the Project.

Additionally, a Citizens Committee will be formed to help guide the Project. Meetings will be held on a regular basis to ensure local input to the Project's development.

V. PROCESS FOR IMPLEMENTATION OF PROJECT

The completion of this project depends on the execution of several phases, including initial assessment, environmental studies, engineering design, and construction.

An initial assessment will examine existing information and results from preliminary site studies to determine the feasibility of creating a wetland habitat at the proposed site.

Detailed environmental studies will be conducted to assess the impacts of the project on the existing environment. These studies will include a hydrodynamic study, investigating the effects of this Project on the circulation of the Patapsco River to ensure the health of the river and Baltimore Harbor. The results of the environmental studies will aid in obtaining the necessary permits from the U.S. Corps of Engineers, Maryland Department of the Environment, Department of Natural Resources, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service and National Marine Fisheries.

Engineering studies will produce the design for the wetlands project. Major portions of these studies will include the design of the retaining facility, developing methodologies for filling the site, and developing the habitat.

Three phases are involved in the construction of the project. The retaining facility will be constructed in the initial phase to hold the fill materials. Upon completion of the retaining structure, the site will be filled using materials dredged from the approach channels to Baltimore Harbor. The dredged materials will be placed in the site until the sediments reach an acceptable elevation for developing the wetland and upland habitat.

VI. STATUS OF PROJECT

MPA completed an initial assessment of the site in November, 1992 and has determined that wetlands creation is feasible.

The hydrodynamic study was initiated in November to investigate the effects of this Project on the circulation of the Patapsco River to ensure the health of the Patapsco River/Baltimore Harbor.

Design consultants will now be selected to assess the environmental impacts of the Project and provide the engineering design.

VII. SCHEDULE

o	Environmental studies and engineering design	3/93-3/94
o	Permits will be obtained	1/94-6/94
o	Retaining structure construction	10/94-10/95
o	Wetlands development	1995-2005

VIII. CONCLUSION

Detailed engineering and environmental studies will be performed to create several hundred acres of wildlife habitat consisting of aquatic, intertidal wetland, and upland habitat. The site will be filled and the wetlands will be constructed with materials dredged from the approach channels to Baltimore Harbor. A visual buffer will be created with trees and shrubs to enhance the aesthetics of the site and to shield the habitat from the industrial activities. The Maryland Port Administration and the Maryland Environmental Service have undertaken the Bethlehem Steel Shoreline Reclamation to demonstrate the benefits of wetland projects to the State of Maryland and its citizens.

December 1992

Consultant Open Ended Contract
Engineering Services

PLACEMENT AREA MANAGEMENT PLAN

Description:

Dredged material placement area management plans are required for CSX/Cox Creek, Bethlehem Steel and Hart Miller Island sites in order to maximize the available and future capacity for sediments removed from the channels serving the Port of Baltimore. The management plans shall meet the requirements of The Maryland Port Administration's Dredging Needs and Placement Options Program. Where appropriate, the management plans will include the following:

crust management - evaluation of existing program at Hart-Miller and plan development for CSX/Cox Creek and Bethlehem Steel:

facility evaluation - evaluate existing conditions and capacity at CSX\Cox Creek:

facility development - develop facility plan to identify appropriate modifications to maximize site capabilities at CSX/Cox Creek:

operations planning - develop operations plans to accommodate dredged material schedule at Hart-Miller, CSX/Cox Creek and Bethlehem Steel:

plan implementation - provide technical assistance to implement both crust management and dredged material operations plans at Hart-Miller Island, CSX/Cox Creek and Bethlehem Steel:

closure plans - develop facility closure plan after the termination of placement operations. This component will focus on requirements to produce future recreation and or terminal development.

Crust management operations have been initiated at Hart Miller Island in order to gain the maximum capacity for dredged material placement from the 50 Foot maintenance dredging projects. Crust management operations will be required at HMI after the year 2000, to facilitate lowering the north cell to 18 feet by the year 2007 for MPA to comply with DNR wetlands license requirements.

Scope of Work:

1. Crust Management - CSX/Cox Creek and Hart Miller Island

   a. Develop crust management plans for each site

   b. Plans Implementation Evaluations

   c. Analyze effects of sediment on sites

   d. Evaluate equipment use and manpower performance

   e. Attend biweekly progress meetings to evaluate crust management progress

   f. Produce monthly progress reports

2. CSX/Cox Creek - Facility Operations Plan

   a. Perform a site evaluation of existing and potential capabilities to receive dredged sediment

   b. Design an operations plan to include:

      1. schedule shall consider placement of .8 mcy/yr over an 8 year period for a total capacity of 6.2 mcy.

      2. site infrastructure modifications (dike raising, spillway construction, truck turnarounds,etc.) necessary to implement a crust management program,

   b. Preliminary evaluation of dewatering and consolidation characteristics prior to placement of dredged material in order to determine facility capacities (PCDDF)

3. Written report(s):

   a. Preparation of written report(s) shall be made of the task assigned including minutes of meetings associated with this contract.

3. Contract length - 3 years

4. Estimated budget - $500.000

Notes:

1. Check on budget allotment in Bay Enhancement Program
2. Coordinate procurement with MPA Engineering
3. Finalize scope of work
4. Develop engineer's estimate
5. Inspections responsibility of site modifications

Product:

To develop a crust management plan for CSX/Cox Creek site located on Marley Neck. An estimated xxx cubic yards of capacity would be achieved. The plan would include both mechanical and hydraulic placement operations.

To develop a long term dredged material placement and management plan at HMI.

Specifications:

CSX/Cox Creek Site - evaluate existing facility conditions and

make recommendations to maximize existing capacity: spillway design: spillway monitoring requirements: facility placement operations plan for hydraulic and mechanical placement: waterside facilities: pcddf model runs to estimate remaining capacities.

Hart Miller Island - pcddf model runs to estimate remaining capacities: biweekly meetings to evaluate crust management progress: monthly progress reports: to provide technical assistance for maximizing crust management operations in both the north and south cells.

Schedule:

36 months

Budget:

CSX/Cox Creek	$350.000
HMI	$150.000
Total	$500.000

Maryland Department of Natural Resources

Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, Maryland 21401
(410) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

April 14, 1993

Mr. William Lear
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, MD 21224-6621

Dear Mr. Lear:

The attached document is the Scope of Work for the Design Phase of this project. The Scope will be the guidelines for the Proposals submitted by the three prospective Architect/Engineering firms. As such, th MPA has requested that you as a member of the Working Group review those sections which relate to your agency for completeness. If you have comments or changes to the Scope of Work, please submit them to me by May 3, 1993. I would also appreciate a note, for tracking purposes, if you approve of the Scope as it is.

If you have questions about the project or need additional information, please contact Mr. Bill Lear or me.

Sincerely,

Robert L. Smith
Project Manager

cc: Bill Lear
Keith Tate

ENVIRONMENTAL/ENGINEERING INVESTIGATIONS AND DESIGN FOR BETHLEHEM STEEL SHORELINE RECLAMATION

SCOPE OF WORK

INTRODUCTION

The purpose of this contract is to determine the feasibility and design of wetlands and upland habitat to environmentally enhance a portion of shoreline and adjacent waters at Bethlehem Steel Corporation's (BSC) Sparrows Point Facility using maintenance dredged materials to construct. The project site located at Sparrows Point, Maryland on the Patapsco River consists of approximately 5000 feet of shoreline and is bounded on three sides by the Brewerton, the Pennwood, and the Sparrows Point Channels. The project will use sediments dredged from the harbor approach channels to create several hundred acres of aquatic and intertidal wetlands, and upland habitat for wildlife along the river.

Information on the project site including topographic and bathymetric surveys, and preliminary geotechnical assessment has been assembled and is available for review by Consultants by contacting Mr. Frank Hamons, Manager, Harbor Development, Maryland Port Administration, 2310 Broening Highway, Baltimore, Maryland 21224, telephone (410) 631-1102. A hydrodynamic modelling is currently underway to assess the effects of the project on Baltimore Harbor and the Patapsco River. These results will be available to consultants when modelling is completed in approximately 3-5 months (June - August 1993).

The following outline is intended to define the scope of work to be performed by the Consultant and not to establish the sequence of work. The Consultant will be responsible for developing and maintaining a more detailed scope of work and progress schedule for the project which shall be subject to the approval of the Maryland Port Administration. The Consultant shall develop the project to the level of preparing an integrated plan for dredged material placement, facility operations and site layout, wetlands and upland vegetated berm development, final permit applications, dike construction plans, specifications and cost estimates, and schedules for awarding a contract for the construction of the facility.

The Consultant will be required to use a two phase approach. Phase I is to determine the feasibility to construct and operate the Project, and to develop the wetland and upland habitats using maintenance dredged material. Phase II will be to produce a design for dike construction, complete with plans and specifications. Phase II may not be executed if Phase I determines that the project is not feasible. The anticipated services for Phase I and Phase II are described below.

PHASE I.

TASK I. Scope Refinement and Inventory

A. The Consultant shall attend an initial conference with the Maryland Port Administration (MPA) and the Maryland Environmental Service (MES) to finalize the schedule, scope of services and administrative procedures for the

coordination of the project.

B. The Consultant shall assemble physical data concerning the project site. At the initial conference, the Consultant will be provided topographic and bathymetric surveys data, an aerial photograph of the site, and preliminary geotechnical assessment and foundation analysis. Results from the hydrodynamic model study will be available within approximately three (3) months after the initial conference.

C. The Consultant shall identify the necessary permits required for the construction and maintenance of the wetland and upland habitat.

TASK II. Site Development

The Consultant shall determine the schedule for development, desired wetlands and uplands habitat characteristics, estimated capacity of the facility, the types of dredged materials available for site development, and integrated plan for site layout and operation to maximize dredged material placement efficiency and site capacity, including the sequence and method of placement of dredged material, procedures for managing the project site, and for achieving the desired site characteristics of the developed wetlands and upland habitat after the completion of dredged material placement operations.

TASK III. Alternative Dike Designs to be Evaluated

A. The Consultant shall evaluate the following three dike design alternatives* and determine the effectiveness of each with respect to the site performance requirements:

(a) Sand base (to elevation .6) with oyster shells dike on top geotextile on bottom.

(b) All oyster shells with geotextile.

(c) All light weight slag with geotextile.

In order to be acceptable, the slope stability factor of safety for any recommended dike design alternative must exceed 1.2

B. The Consultant shall further review the performance of each alternative design in consultation with MPA staff, prior to recommending the layout to be developed.

TASK IV. Field Investigations

A. The Consultant shall conduct on-site engineering investigations necessary to develop the design and cost estimates for the selected dike alternative and site layout. The design will be based upon existing conditions as determined by these new engineering investigations which will include topographic and hydrographic surveys and geotechnical analysis of the site.

B. The Consultant shall conduct an environmental assessment

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* Gahagan & Bryant Associates' Feasibility Evaluation of the Bethlehem Steel Shoreline Enhancement Project. November 1992

the project site. The survey shall be performed in accordance with NEPA guidelines and shall include, but not limited to, the following:

(a) Sediment Quality - Composites of samples from the geotechnical investigations (two shallow, two deep) to be analyzed for priority pollutants, nutrients, oil and grease, and iron.

(b) Water Quality - Vertically-composited samples to be analyzed for the same constituents as (a) above.

(c) Aquatic Ecology - Surveys (Spring, Summer, and Autumn) to address:

-benthic invertebrates (four stations)

-ichthyoplankton (two stations)

-fish (two seines and two trawl stations)

-submerged aquatic vegetation (species present and locations of each within the project site)

At each station, in-situ measurements of pH, dissolved oxygen, temperature and salinity shall be performed at the water surface, at mid-depth and at the bottom. At each benthic station substrate characteristics (including sand, silt, clay, water, and organic content) shall be determined. Data analysis should include relative abundance, diversity, and distribution of benthos, ichthyoplankton and fish.

(d) Terrestrial Ecology - Survey to address flora and

fauna present and delineation of tidal and non-tidal wetlands.

TASK V. Preliminary Dike Design and Site Layout

A. The Consultant shall prepare preliminary designs for the selected dike design and site layout including, but not limited to, the developed wetland habitat and the vegetated upland berm habitat, the retaining structures (both during construction and after habitat development), the slope protection, spillways, and unloading facilities for handling and placing the dredged materials.

B. The Consultant shall also develop preliminary construction cost estimates.

TASK VI. Reports

The Consultant shall prepare a comprehensive report presenting the results of the environmental and engineering investigations.

A. The engineering portion of the report shall contain plans, profiles, and cross-sections in sufficient detail for selecting the dike design and site layout, developing the cost estimates, and preparing the permit applications.

B. The environmental assessment report shall include, but is not limited to the following:

(a) description of the proposed action, purpose and need;

(b) environmental setting (i.e., natural and human

environment including protected species, and archeological/historical features) including a magnetometer survey of project area;

(c) effect of proposed action and wetland and upland alternatives (construction, operations, and maintenance); and,

(d) identify acceptable mitigation options for unavoidable impacts.

C. The Consultant shall submit ten (10) copies of the comprehensive report presenting the environmental and engineering results of the above work.

TASK VI. Cost Estimates

The Consultant shall prepare cost estimates for all aspects of the project including construction, operations, wetland development, vegetated upland berm development, and maintenance. The Consultant shall submit the cost estimates as part of the comprehensive report in Task V.B.

TASK VII. Permit Applications

The Consultant shall prepare Draft Permit Applications which shall include, but not limited to, the Department of the Army Permit (Section 10, Section 404), Maryland State Wetlands License, and Water Quality Certificate.

PHASE II.

TASK I. Design

The Consultant shall prepare detailed plans, profiles, and cross sections for the project including, but not limited to, the developed wetland habitat, the vegetated upland berm, the retaining structures (both during construction and after the wetland development), the slope protection, spillways, and unloading facilities for handling and placing the dredged materials.

The Consultant shall develop the construction cost estimates.

TASK II. Reports, Plans and Specifications

The Consultant shall prepare and submit one (1) reproducible set and four (4) copies of the Construction Plans and Specifications for the Project.

TASK III. Permits

The Consultant shall prepare the Final Permit Applications for MPA's signature and support MES in obtaining the permits.

March 25, 1993

permits:scope.bth

DRPP Sparrows Pt

DRAFT

SPARROWS POINT
SHORELINE RECLAMATION PROJECT

Public Information Meeting No. 4

DATE: June 10, 1993

LOCATION: Sparrows Point High School

GROUP: North Point Peninsula Community Coordinating Council & Millers Island Edgemere Businessmen's Association (Sponsors of Town Meeting)

ATTENDANCE: Approximately 75 people attended the town meeting (sign in sheet forthcoming)

OVERALL RESPONSE:

The attendees were steadfastly opposed to the project. Only three speakers addressed the project from a positive sense. In all the group felt the area was rebounding to a better state of environmental health and that they had had their share of "these type projects". Overlying these arguments was a great distaste of Bethlehem Steel and a mistrust of State government. Following a well orchestrated series of prepared speeches, Senator Stone and Delegate DePazzo spoke in support of those who were opposed to the project. Senator Stone was of the opinion that the project would not be allowed by law (HMI five mile rule) in its current form. Jim Dieter (DEPRM) and Don Mason noted the attendees reaction and were to report to County Executive Hayden and the County Council respectively.

COMMENTS:

1. The current law prohibits dikes within 5 miles of HMI.
2. Current bottom has habitat, it is not sterile.
3. There are oyster beds in the area.
4. Bethlehem Steel Corp. will get a tax break from this.
5. Where is the funding coming from?
6. Bethlehem Steel has the most to gain from the project.
7. This project is a containment area.
8. Shoreline Reclamation is a farce, this is a dump site.
9. Wetlands creation is good for the fish.

10. This site was not one of the 160 sites considered by MPA in the Masterplan. Why?

11. This site is a good location for wetlands.

12. Watermen oppose deep water dumping.

13. Why do we need all this dredging?

14. We do not trust Bethlehem Steel.

15. How far out will the project go.

16. Bethlehem Steel has gotten enough land.

17. We do not want to give up navigable waters.

18. Bethlehem Steel has gotten enough land.

19. The project will not solve the dust and dirt problem at Bethlehem Steel.

September 13, 1993

Ms. Virginia Tolbert
President
North Point Peninsula Community
Coordinating Council
7741 North Point Creek Road
Baltimore, MD 21219

Dear Ms. Tolbert:

I have read your letter of August 17, 1993 concerning the Sparrows Point Shoreline Reclamation Project proposed by the Maryland Port Administration and the Maryland Environmental Service. The input from the early public meetings has been helpful in identifying items of concern to the local citizenry. Some of the statements in your letter, however, indicate a misunderstanding of our project so I will address your concerns point by point.

We are not proposing to construct a containment facility at Sparrows Point. Our intent is to create a wetlands habitat to replace some of the wetlands lost in your area through 50 years of residential and industrial development. The proposed wetlands will need some protection from waves generated on the river and we envision using a series of low-profile breakwaters for this purpose. A containment dike is not required nor contemplated.

1. The size of the wetlands has not been determined. A model study is underway at the University of Maryland investigating the impact of this project on the Patapsco River and the Baltimore Harbor. It is critical to maintain the natural flow of the river system and the proposed project will be limited to a size which will not affect the flow parameters.

Over the years, industrial and residential growth has filled thousands of acres of productive wetlands and river bottom throughout the Chesapeake Bay and Sparrows Point is a prime example. Associated with this loss is a decline in the fish and wildlife populations along the shore. The Sparrows Point site has very little productivity. The bottom is a soft, iron-laden mud which, according to State and federal resource agencies, has no oysters, minimal submerged aquatic vegetation (SAV), and very limited crabbing and fishing potential. A productive wetlands established at Sparrows Point, as we are proposing, would provide habitat for fish, crabs, and other wildlife. The adjacent embayments would also experience increased health due to the proximity of the created wetlands. We intend to verify the resource agency's information with a series of field studies.

SIZE OF PROJECT?

(1) The proposed project does not promote unsafe navigation for recreational boating. The space between the Brewerton Channel and the project site provides adequate room for safe boating. In fact, Sollers Point beneath the Key Bridge is closer to the channel than the breakwaters proposed for Sparrows Point.

Again, we have no intentions of constructing a containment area at Sparrows Point. We propose to build a wetlands habitat to enhance a barren shoreline and improve the biological productivity of the Sparrows Point area. We will present new information to the public as it becomes available. If you have questions in the mean time, please contact me at (410) 631-1102.

Sincerely,

Frank L. Hamons
Manager, Harbor Development

cc: Lee Zeni, MES
C. JORDON
A. TEEL
D. FRACH
SEN. STONE?
HOFD ?

Maryland Port Administration
Maritime Center II
[illegible]oening Highway
[illegible]re, Maryland 21224-6621

September 16, 1993

Mr. Lee Zeni
Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, Maryland 21401

RE: Sparrows Point Shoreline Reclamation Project
Project Agreement No. 593917

Dear Mr. Zeni:

I am responding to your request to proceed with the Sparrows Point Shoreline Reclamation Project, Agreement No. 593917, Task 5 - Additional Field Studies.

Please make the following changes in the proposed scope of work, as Bob Smith discussed with Bill Lear during a recent conversation (copy attached):

1. The following items should be deleted;
   - public participation (3.2)
   - solicit and select A/E for feasibility study (3.3)
   - discussions with property owners (3.4)

2. The following items should be retained;
   - field studies (3.1)
   - project management

Please forward a revised scope of work and budget to me at your earliest convenience. The scope of work for field studies should be modified to include an evaluation of the potential to create a 10 mcy capacity site in accordance with the citizens suggestion to use less open water and more Bethlehem Steel upland for site location.

My telephone number is 410-631-1102

Fax: 1-410-631-_____

If you have any questions concerning this information please feel free to contact me.

Sincerely,

Frank L. Hamons, Manager
Harbor Development

FLH/kyj

attachment

cc: B. Lear
A. Serio
B. Smith, MES

1:permits:593917.tk5

DRAFT

TASK #5

SPARROWS POINT SHORELINE RECLAMATION
PREFEASIBILITY - FIELD STUDIES

1.0 BACKGROUND

Information obtained from the initial public hearings requires additional work be performed to facilitate the advancement of the Sparrows Point Shoreline Reclamation Project. These activities should help clarify issues prior to initiation of the feasibility study.

2.0 PROJECT DESCRIPTION

MES will conduct field studies to collect the specific site information necessary to address the concerns of the public. The information will be prepared for presentation to elected officials, special interests groups, and the general public. MES will incorporate the results from the field studies and the public response into the Scope of Work for the Design Study and assist MPA in the solicitation and selection of an Architect-Engineer.

3.0 SCOPE OF WORK

3.1 Field Studies

Limited field studies are required to address citizens' concerns relating to the development of the project site. These concerns include the ability of the site to support productive communities of fish, oysters, crabs, and submerged aquatic vegetation (SAV), and the boating safety aspects of reducing the distance between the shoreline and the main shipping channel. MES will subcontract the technical field work and coordinate activities to acquire sufficient information to address these issues.

3.2 Public Participation

MES will conduct informal meetings to disseminate information about the Project and solicit input from local elected officials and the general public.

3.3 Solicit and Select A-E for Design Phase

An Architect/Engineering Firm will be selected for the execution of the Design Phase. Following the State Procurement requirements, MES will develop the RFP and refine the existing Scope of Work to solicit interest from qualified Consultants for the design of the Project. MES will also assist MPA in the review and evaluation of the technical and cost proposals and in the negotiations with the prospective firm.

3.4 Property Owner Negotiations

Bethlehem Steel Corporation (BSC) currently owns the property proposed for shoreline reclamation. BSC owns additional property at Sparrows Point which may be suitable for use as upland placement areas as brought out at the public meetings. MES will initiate discussion with BSC for the potential use of the property for dredge material placement, and coordinate the concerns of the local community regarding the partnership with BSC.

MES will develop an agreement with BSC as an active participant in the enhancement of the Patapsco River and to demonstrate the partnership between the State and the Private Sector for developing projects which improve the environmental quality of the shorelines of State waters and provide placement areas for materials dredged from the approach channels to Baltimore Harbor.

4.0 SCHEDULE

The duration of this task will be 11 months, from August 15, 1993 to June 30, 1994.

5.0 DELIVERABLES

5.1 Revised Scope of Work - January 1, 1994

6.0 Project Manager - Robert Smith

7.0 BUDGET

A.	Field Studies	$ 33,725
~~B.~~	~~Public Participation~~	~~13,875~~
~~C.~~	~~Solicit & Select A-E for Feasibility Study~~	~~14,030~~
~~D.~~	~~Discussions with Property Owners~~	~~10,200~~
E.	Project Management	8,170
	TOTAL	$ 80,000

7.1 Labor

Employee	Rate	Hours	Amount
L. Zani	$59.58	170	$10,129
K. Tate	58.41	210	12,266
R. Smith	45.47	360	16,369
S. Baharlou	39.71	40	1,588
T. Thohan	33.58	80	2,686
C. Norris	33.58	80	2,686
P. Mueller	19.03	40	761
		TOTAL LABOR	$46,486

7.2 Direct Expenses

Subcontracted Services	$30,000
Mileage	914
Postage & Communications	700
Supplies & Materials	900
Computer Supplies	1,000
TOTAL EXPENSES	$33,514
TOTAL COSTS FOR TASK 5	$80,000

7.3 Estimated Fiscal Year Needs

FY94 $80,000

MARYLAND PORT ADMINISTRATION
INTER-OFFICE MEMORANDUM

September 17, 1993

TO: Frank Hamons

FROM: Bill Lear

SUBJECT: Attendance Roster from the Sparrows Point Shoreline Project Town Meeting

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Per your request, I contacted Mr. Bob Smith (MES) and inquired as to the status of obtaining the attendance roster from the Sparrows Point Shoreline Town Meeting held on the evening of June 10, 1993 at the Sparrows Point Senior High School. Mr. Smith advised me that Mr. Sonny Minnick (MES) was instructed to contact Ms. Virginia Tolbert who is President of the North Point Peninsula Community Coordinating Council and also the organizer who presided over the town meeting.

Mr. Minnick contacted Ms. Tolbert to obtain a copy of the roster. Mr. Tolbert responded by stating that she would not relinquish the roster but would instead provide a list of organizations that were represented at the meeting. Mr. Minnick informed Ms. Tolbert that the list of organizations would not be sufficient and that MPA and MES required the attendance roster as a matter of record. Ms. Tolbert refused to comply with Mr. Minnick's request, without explanation.

Mr. Smith stated that he will formally request in writing a copy of the attendance roster from Ms. Tolbert.

BL/pdr

MARYLAND PORT ADMINISTRATION
INTER-OFFICE MEMORANDUM
October 5, 1993

TO: Adrian Teel

FROM: Frank Hamons

SUBJECT: North Point Peninsula Community correspondence to Senator Stone (9/15/93) Sparrows Point Project

---

I would like to clarify several statements discussed in the September 15, 1993 letter to Senator Stone from the North Point Peninsula Community (copy attached). The following points were presented:

Point 1. Paragraph 3

"....Ms. Gintling found out about the September 1 meeting quite by accident..., two important meetings were held in May and August...without representation from our community.., This is a clear and blatant violation of the procedure promised by both MPA and MES."

Clarification:
Ms. Gintling was notified of the September 1 meeting during her attendance at the August 21st of the Hart-Miller Island Citizens Oversight Committee meeting.

There have been four (4) meetings with local officials, civic and community groups during May and June to discuss preliminary concepts of the Sparrows Point project. Each meeting was targeted for a specific group.

As for the "violation of procedure" the purpose of the meetings was to give the local community groups an opportunity to comment on preliminary concepts of the Sparrows Point project. We received several concerns which will be investigated. The meetings have been the mechanism to include community input before the project advances to the feasible stage.

Point 2. Paragraph 4

"..No meeting has been scheduled with NPPCC (North Point Peninsula Community Council).. But none of that input will ever be made a part of the record....

Clarification:
A June 10th meeting was initially scheduled with the North Point Peninsula Community Coordinating Council. At their request a "Town Meeting" was scheduled for a larger audience. These meetings were coordinated by MES. Since May and September MPA has schedule two (2) meetings for the POP citizens committee members.

We have made requests to the NPPCC to provide us with the attendance list for the June 10th meeting for the preparation of meetings minutes. Our requests have been denied.

Point 3, Paragraph 4

"...a permit has been issued..."

Clarification:
Prior to the issuance of a permit or a wetlands license a notification is published of the project. In addition, a hearing may be scheduled for public input. The Sparrows Point project has not reached this stage. A pre-application meeting was conducted with the stage and federal regulatory representatives to determine preliminary requirements should an application be submitted.

Point 4, Paragraph 5

"...MES, MPA and the planning committee in general are ignoring any potential threat from your Senate bill #977."

Clarification:
The state agencies are aware of the bill and realize that it does not contains provisions for exemptions.

I would like to discuss this information with you at your earliest convenience.

cc: L. Jordan
W. Lear

file:pop\response

SENATE OF MARYLAND
ANNAPOLIS, MARYLAND 21401-1991

NORMAN R. STONE, JR.
STATE SENATOR
7TH DISTRICT
BALTIMORE COUNTY

VICE-CHAIRMAN
JUDICIAL PROCEEDINGS
MEMBER
RULES COMMITTEE
LEGISLATIVE POLICY COMMITTEE
EXECUTIVE NOMINATIONS COMMITTEE

DISTRICT OFFICE:
6905 DUNMANWAY
BALTIMORE, MARYLAND 21222
335-5270

ANNAPOLIS OFFICE:
216 JAMES SENATE OFFICE BUILDING
ANNAPOLIS, MARYLAND 21401-1991
841-3587

September 30, 1993

Maryland Environmental Service
Mr. Keith Tate
Division Chief
Project Planning Branch
2011 Commerce Park Drive
Annapolis, Maryland 21401

Dear Mr. Tate:

I am enclosing herewith a copy of a letter from Mrs. Janice N. Ramsay, 7613 Old Road Bay Front, Baltimore, Maryland 21219 with regards to the proposed "shoreline enhancement" project at Sparrows Point.

As you read her letter you will see that she has made a point of the four most disturbing facts to the community.

I would appreciate if you would submit to me,your answers to Mrs. Ramsay's questions.

With kind regards, I am

-Very truly yours,

Norman R. Stone, Jr.

NRS/jbw

cc: Janice Ramsay

September 15, 1993

Janice N. Ramsay
7613 Old Road Bay Front
Baltimore, MD 21219

The Honorable Norman Stone
6905 Dunmanway
Baltimore, MD 21222

Dear Senator Stone:

At the recent meeting of the North Point Peninsula Community Coordinating Council, Pearl Gintling gave a disturbing report about the proposed "shoreline enhancement" project at Sparrows Point.

On September 1, 1993 a meeting of the project planning committee was held at which Ms. Gintling discovered some disturbing facts about the way in which this planning process has been conducted.

First, Ms. Gintling found out about the September 1 meeting quite by accident, when she received some correspondence mentioning the meeting. She decided to attend, and when she inquired about who were the "citizen representatives" from our community, she was told that <u>she was</u>, even though she had declined that position several months earlier. No replacement was ever sought by the planning committee, who simply proceeded to hold two very important planning sessions, in May and August (that we know of), without any representation from either our community or even Baltimore County at large. This is a clear and blatant violation of the procedure promised by both MPA and MES.

Secondly, at the September 1 meeting, MES and MPA reported that they have been meeting all summer with "interested citizen groups" and that the overall response to the proposal has been favorable. No meeting has been held with NPPCC, who is vehemently opposed to this project. The response from the Edgemere-Miller's Island Business Association was equally negative (except for the president, who appears to stand alone), as was the response from the citizen input meeting held in June at Sparrows Point High School which you attended and spoke. But none of that input will ever be made a part of the record of the planning committee, if no one from our community is involved in the process.

Third, at this September 1 meeting, some mention was made about a permit which had already been issued pursuant to this project. We need to know if such a permit exists, and, if so, how it was issued without community input.

Lastly, and perhaps most disturbing, was Ms. Gintling's impression that the MES, MPA and the planning committee in general are ignoring any potential threat from your Senate bill #977. The committee seems to feel that by disguising this DIKE as "shoreline enhancement", they are exempt from this law.

Senator, we remind you of your promise to us to "go to court, if necessary" to have this law enforced. Your bill was enacted to provide this community protection from just the sort of threat posed by this project. **WE NEED THIS PROTECTION NOW!**

We urge you to work on our behalf to demand that proper procedure for citizen involvement be followed, that the deception currently being disseminated be stopped, and that the law be obeyed.

Your prompt response is anticipated.

Janice N. Ramsay
Vice President
NPPCC

cc. Frank Hamons, MPA
Adrian Teel, MPA
James Gutman, Citizen's Committee

PROPOSED SITE

"PORT ENHANCEMENT PROJECT"

MARYLAND
ENVIRONMENTAL
SERVICE

William Donald Schaefer
Governor

George G. Perdikakis
Director

SPARROWS POINT

October 8, 1993

The Honorable Norman Stone, Jr.
Senator
6905 Dunmanway
Baltimore, MD 21222

Dear Senator Stone:

This letter is in response to your letter of September 30 requesting answers to Ms. Ramsay's questions.

As you know the Maryland Port Administration initiated a comprehensive program to address both short and long term dredged material management issues associated with maintaining adequate navigation channels to the Port of Baltimore. That initiative, the Dredging Needs and Placement Options Program (POP), is designed to come up with workable alternatives for the 100 million cubic yards projected dredging needs over the next twenty years. The Maryland Environmental Service provides direct support to the MPA, particularly with the Bay Enhancement projects such as the proposed Sparrows Point shoreline reclamation and habitat creation site.

As a point of clarification a committee structure was developed by MPA in order to maximize participation in the POP program by interested parties. That structure is designed to provide three tiers of input. The first tier is the Working Groups generally made up of State and federal resource and regulatory agencies. Working groups exist for each of the four Phase I Bay Enhancement projects, such as the Sparrows Point project. These groups assist in steering the technical developments of each potential project. They meet every month or so to review the project status and to help direct project activities. The next tier includes the Citizens Committee. The Citizens Committee was formed to ensure that public views and concerns are addressed. Membership was solicited from local governments, civic, community, conservation and other organizations. At the Citizens Committee meetings, the progress and status of all projects is presented and discussed. The members are encouraged to attend Working Group meetings of their choice. I have enclosed an excerpt from the POP Program document which describes the entire committee structure.

Ms. Gintling was invited to participate in either the citizens committee or the Sparrows Point working group at the June 10 town meeting held at the Sparrows Point High School. As noted in Ms. Ramsay's letter she declined the invitation due to her other commitments. At the August meeting of the HMI Citizens Oversight Committee, a courtesy invitation was again given to Ms. Gintling to attend the September 1 POP citizens meeting. At the September 1 meeting it was reported that the Sparrows Point Working Group met in May and August.

Ideally the public concerns are best managed through the Citizens Committee, in which Baltimore County is represented. We are continuing our search for a specific community representative. Perhaps your office or Ms. Ramsey could help us in this matter.

We reported that four meetings were held with local citizen groups in May and June. At the request of their President, Ms. Virginia Tolbert, the meeting with the North Point Peninsula Community Coordinating Council was opened to the community at large on June 10, 1993 at the Sparrows Point High School. All public input has been documented, distributed to and included in the records of the Working Group, Citizens Committee and Management Committee and is attached for your office records.

We are about to conduct some limited investigations concerning the technical issues raised at the public meetings. Those investigations will address the site's existing conditions with regards to fishing, crabbing and the presence of submerged aquatic vegetation. The recreational navigation impacts will be addressed as well as the potential for an upland site at Sparrows Point.

The support among federal and State resource agencies for this project remains high. However, due to the concerns expressed at the public meetings this project has been taken off the fast track and will proceed with limited and strategic studies to further bare out the community concerns and desires.

Permits have been issued for the Poplar Island emergency erosion protection project as addressed in discussions at the September 1 meeting. Permits have not been issued nor have applications been submitted on the Sparrows Point project.

The State's objective has and will continue to be to create a project that causes improvement to the local ecosystem through the beneficial use of dredged material at this site.

Should you require further information or have questions about any of our projects, please do not hesitate to contact me.

Sincerely,

Keith D. Tate, P.E.
Program Director
Environmental Dredging Program

KDT/pam
Enclosure

bcc: L. Zeni
G.G. Perdikakis
F. Hamons

PROGRAM COMMITTEES

- The Executive Committee consists of representatives of state and federal agencies with direct fiscal responsibilities for performing dredging and dredged material placement activities in Maryland waters.

- The Management Committee consists of representatives of state and federal agencies and environmental organizations with responsibilities to perform, review, regulate, investigate or evaluate dredging and dredged material placement activities.

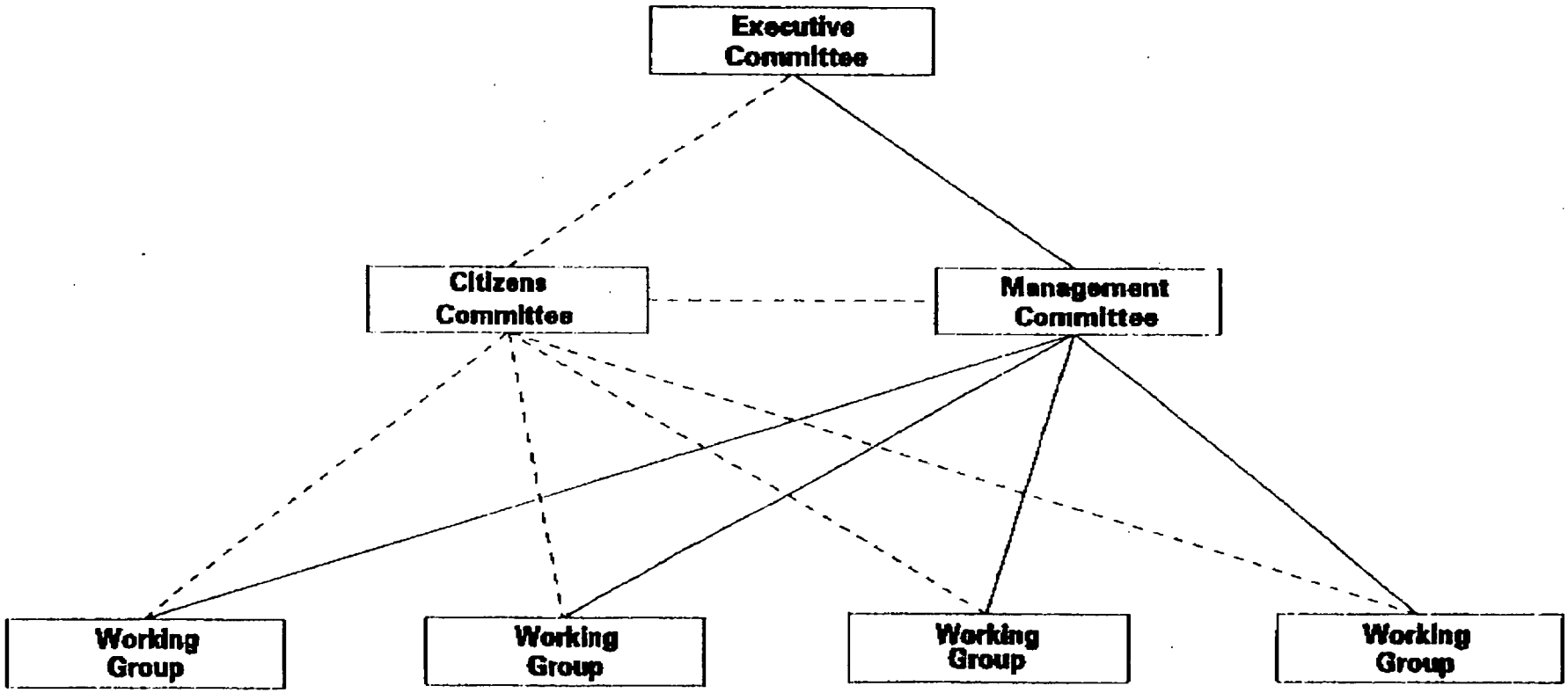
- The Citizens Committee consists of representatives of local governments, civic, community, conservation and other organizations and associations with vested interests in the effects of dredging and dredged material placement activities on their environment, and their quality of life.

- The committee structure for this program is designed to provide for open access between the various functioning groups, i.e., Executive, Management and Citizens Committees, and project working groups.

- Citizens and Management Committees will have appointed liaisons to the Executive Committee, to participate in Executive Committee meetings and to discuss activities, concerns and achievements, and direction of program committees and work groups.

- Work groups will be formed for each project, with core membership coming from agencies and organizations represented on the Management Committee, and will include Citizens Committee representation as determined by the Citizens Committee. Work groups will report periodically to all committees.

Dredging Needs Placement Options Program
Committee Structure Diagram
October 1992



SPARROWS POINT
SHORELINE ENHANCEMENT PROJECT

Public Information Meeting No. 1

DATE: May 19, 1993

LOCATION: Edgemere Knights of Columbus Hall

GROUPS: Edgemere/Millers Island Businessmen's Association and Baltimore County Waterman's Association

ATTENDANCE: Approximately 45 people (sign in sheet forthcoming)

OVERALL RESPONSE:

Attendees were very attentive to the needs of the Port as well the physical description of the proposed shoreline enhancement. The group as a whole committed to working with MPA and MES on the project. Senator Norman Stone concluded the discussion with "Let's keep an open mind about this project".

COMMENTS:

1. This is the first comprehensive approach that the state has taken on dredged material management. The state has a good team to address this issue in MPA/MES.
2. Can Baltimore County residents use Sparrows Point for their creek's dredged materials?
3. Are Pooles Island and Worton Point additional projects planned for implementation under the P.O.P program that we should worry about?
4. Filling 8 to 12 feet of water is not viewed as beneficial.
5. Be sure to consider the safety aspects of displacing recreational boating closer to the shipping channel.
6. Has anyone ever built large wetlands with dredged materials?
7. Large waves must be considered in the breakwater design due to ship traffic.
8. Will existing foundation support the project? Bethlehem Steel has had some failures of their fill materials.

9. Is current site bottom contaminated?

10. Where will contaminated material go if not to Sparrows Point?

11. When will we know the size of the site?

12. How will the structure differ from that at HMI? Will this project eliminate the use of the other inner harbor sites?

13. This group of state people working on the dredging program has done an excellent job at HMI.

14. Let's keep an open mind about this project.

SPARROWS POINT
SHORELINE RECLAMATION PROJECT

Public Information Meeting No. 2

DATE: May 21, 1993

LOCATION: Battle Grove Democratic Club Hall

GROUP: Battle Grove Democratic Club

ATTENDANCE: Approximately 100 people (sign in sheet forthcoming)

OVERALL RESPONSE:

Attendees were apprehensive that their community is being targeted for another project . The group's main opposition was towards Bethlehem Steel and its history with the community. The group is well aware of the Port's needs for dredging but are mindful of development in their community.

COMMENTS:

1. Is anyone investigating the use of other sites in the harbor? Are we the only community that gets hit?
2. Where is the funding coming from?
3. Has there been consideration given to restoring the shoreline of Kent Island and other bayfront properties?
4. What happens if the future studies determine this project affects the flow patterns in the adjacent tributaries?
5. Who will do the testing of the incoming materials?
6. Will the contractor be held responsible if the materials placed here are found to be contaminated?
7. Are we required to hold public hearings before this project is permitted?
8. Bethlehem Steel has continuously filled this area with slag - cutting off the flow through this area (Bear Creek) and the channel is getting smaller. How much farther into the river does this project extend?
9. Will there be a community committee for this project? Will the Wells-McComas Association be represented? How will the committee be informed?

SPARROWS POINT
SHORELINE RECLAMATION PROJECT

Public Information Meeting No. 3

DATE: June 7, 1993

LOCATION: Dundalk Church of the Brethren

GROUP: The Greening of Dundalk

ATTENDANCE: 16 people

OVERALL RESPONSE:

The Group had an overall positive attitude for this project and were very supportive of the efforts for improving the waters and shoreline of the Patapsco River. Several members like the concept and want to keep the group involved at some level of citizen input.

COMMENTS:

1. Coming to the public before the project is underway is the right way. Citizens want to have some involvement with projects generated outside the community.

2. Project should improve fishing and crabbing in that area. Hardly anyone fishes in front of Bethlehem Steel.

3. Will this project affect the water quality of the local creeks?

4. Recreational boaters and fishermen don't want to have to use the channel with the big ships. How far into the river does this project extend?

5. Since the breakwaters are so close to the ship channel, won't they have to be bigger to withstand the wake from the ships?

6. Has anyone ever built wetlands with dredged materials? Are there any close by that we can see?

7. Someone (from this group) should go to the upcoming town meeting to support this project.

SPARROWS POINT
SHORELINE RECLAMATION PROJECT

Public Information Meeting No. 4

DATE: June 10, 1993

LOCATION: Sparrows Point High School

GROUP: North Point Peninsula Community Coordinating Council & Millers Island Edgemere Businessmen's Association (Sponsors of Town Meeting)

ATTENDANCE: Approximately 75 people attended the town meeting (sign in sheet forthcoming)

OVERALL RESPONSE:

The attendees were steadfastly opposed to the project. Only three speakers addressed the project from a positive sense. In all the group felt the area was rebounding to a better state of environmental health and that they had had their share of "these type projects". Overlying these arguments was a great distaste of Bethlehem Steel and a mistrust of State government. Following a well orchestrated series of prepared speeches, Senator Stone and Delegate DePazzo spoke in support of those who were opposed to the project. Senator Stone was of the opinion that the project would not be allowed by law (HMI five mile rule) in its current form. Jim Dieter (DEPRM) and Don Mason noted the attendees reaction and were to report to County Executive Hayden and the County Council respectively.

COMMENTS:

1. The current law prohibits dikes within 5 miles of HMI.
2. Current bottom has habitat, it is not sterile.
3. There are oyster beds in the area.
4. Bethlehem Steel Corp. will get a tax break from this.
5. Where is the funding coming from?
6. Bethlehem Steel has the most to gain from the project.
7. This project is a containment area.
8. Shoreline Reclamation is a farce, this is a dump site.
9. Wetlands creation is good for the fish.

10. This site was not one of the 160 sites considered by MPA in the Masterplan. Why?

11. This site is a good location for wetlands.

12. Watermen oppose deep water dumping.

13. Why do we need all this dredging?

14. We do not trust Bethlehem Steel.

15. How far out will the project go.

16. Bethlehem Steel has gotten enough land.

17. We do not want to give up navigable waters.

18. Bethlehem Steel has gotten enough land.

19. The project will not solve the dust and dirt problem at Bethlehem Steel.

MARYLAND
ENVIRONMENTAL
SERVICE

William Donald Schaefer
Governor

George G. Perdikakis
Director

10/12/93
DATE

FACSIMILE TRANSMITTAL

COVER MEMORANDUM

TO: Dave Bitoo

FROM: Keith Tate

TOTAL NUMBER OF PAGES (including cover memo) 13

We are transmitting from an Omnifax G66, Thermal Facsimile Transceiver (Telephone # 410-974-7236). If you have any questions or do not receive all the pages, please call 410-974-7254.

Thank you.

ADDITIONAL MESSAGE

2011 Commerce Park Drive • Annapolis, Maryland 21401 • 410/974/7281 • Fax 410/974/7267

Contract # 294904
PIN 600105P

Maryland Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224-6621

January 12, 1994

Mr. Robert Smith
Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, MD 21401

Re: Sparrows Point Shoreline Reclamation Project Agreement No. 593917

Dear Mr. Smith:

This is your notice to proceed with Task 5, Evaluation of Public Concerns (attached) as part of the Sparrows Point Shoreline Project.

If you have additional questions please contact me at (410) 631-1102.

Sincerely,

Frank L. Hamons
Manager
Harbor Development

FLH/BL:pdr

attachment

cc: Dave Bibo
Tony Serio
Bill Lear

2:hamons:593917.bl

TASK #5

SPARROWS POINT SHORELINE RECLAMATION
EVALUATION OF PUBLIC CONCERNS

1.0 BACKGROUND

Meetings were held in May and June 1993 with local civic groups to gather community input to the beneficial-use of dredged materials at Sparrows Point. The citizens are generally opposed to any encroachment on the rivers and embayments in the project vicinity , but specific opposition to the project stemmed from concerns about the current resource value of the site.

Citizens report that the site supports productive communities of fish, oysters, crabs, and submerged aquatic vegetation (SAV). An additional concern was further restricting the navigation on the Patapsco River. Recreational boaters, motor and sail, cross the proposed site in transit to and from the Inner Harbor or while racing.

As an alternative to the proposed project, the citizens suggested using other property at Sparrows Point to construct an upland placement area. This was reaffirmed at the November 3 meeting of the Placement Options Program Citizen Committee.

The public's concerns and suggestions must be substantiated to facilitate the advancement of the Sparrows Point Shoreline Reclamation Project. Work under this task will include compiling information on biological productivity through the existing literature and from specific field studies. Additional work will address the navigational issues on the project site, and the potential use of additional upland property.

2.0 SCOPE OF WORK

TASK 5A. Collection of Environmental Information

The purpose of Task 5A is to determine the current trend of biological productivity of the Sparrows Point project site. MES will prepare a Scope of Work for a set of studies which include a literature search and field studies to gather information and assess the level of biological productivity. It is anticipated that the field study will span four seasons with sampling/collection cruises in each season. Four major biological parameters to be sampled are: blue crabs, invertebrate benthos, adult fish, and fish eggs and larvae. The studies will be developed to maximize their application to future environmental evaluations on the site.

TASK 5B. Navigational Safety

The navigational and boating safety aspects of reducing the distance between the shoreline and the main shipping channel will be assessed. This assessment will be based on a review of the navigation throughout Baltimore Harbor and boating safety requirements of federal and State regulations.

TASK 5C. Assessment of Upland Placement Potential

Bethlehem Steel Corporation (BSC) currently owns the property proposed for shoreline reclamation. BSC owns other property at Sparrows Point which may be suitable for use as upland placement areas as brought out at the public meetings. BSC also recently sold some parcels of property to Baltimore County. MES will coordinate with the land management groups at Baltimore County and Bethlehem Steel Corp to assess the potential use of these properties as upland placement sites for dredged materials. This assessment will focus on (1) innovative and interactive solutions with regards to the steel making operations of BSC including capping environmentally detrimental materials, and (2) a review of existing Baltimore Land Use Reports for the vicinity of Sparrows Point.

Task 5D. Response to Public Inquiries

The early meetings held with the elected officials and the civic and community groups have generated inquiries concerning the activities of the Sparrows Point project. Subject to MPA approval, MES will follow up on these inquiries as necessary to coordinate and/or generate appropriate responses. MES shall provide documentation of all inquiries.

Task 5E. Project Management & Reports

Subject to MPA approval, MES will be responsible for all budgets, schedules and scopes of work for this task. In addition, MES will coordinate the activities of the project with the Sparrows Point Working Group of the Dredged Materials Placement Options Program. MES will submit monthly progress reports and a final report on the activities and results from this stage of the project.

3.0 TERM

The duration of this task will be 12 months.

4.0 DELIVERABLES

4.1 Report of Field Studies
4.2 Summary of Navigational Safety
4.3 Summary of Uses of Adjacent Property

5.0 Project Manager - Robert Smith

6.0 BUDGET

A.	Collection of Environmental information	$ 89,034
B.	Navigational Safety	4,046
C.	Assessment of Upland Placement Potential	16,167
D.	Response to Public Inquiries	10,329
E.	Project Management & Reports	10,375
	TOTAL	$129,951

6.1 Labor

Employee	Rate	Hours	Amount
L. Zeni	$59.58	20	$ 1,192
K. Tate	58.41	180	10,514
R. Smith	45.47	400	18,188
T. Thohan	33.58	180	6,044
S. Baharlou	39.71	80	3,177
B. Ray	26.60	80	2,128
C. Donovan	39.71	60	2,383
C. Norris	33.58	60	2,015
P. Mueller	19.03	40	761
		TOTAL LABOR	$ 46,401

6.2 Direct Expenses

Subcontracted Services	$ 80,000
Mileage	600
Postage & Communications	400
Supplies & Materials	400
Computer Charges	2,150
TOTAL EXPENSES	$ 83,550
TOTAL COSTS FOR TASK 5	$129,951

6.3 Estimated Fiscal Year Needs

FY 1994	$59,951
FY 1995	$70,000

copy - Law Secy

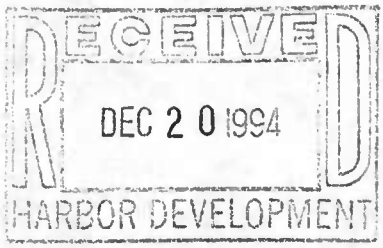
MARYLAND
ENVIRONMENTAL
SERVICE

William Donald Schaefer
Governor

~~George G. Perdikakis~~
Director

December 21, 1994

Mr. Frank L. Hamons, Manager
Harbor Development
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, MD. 21224-6621



SEE FRANK

Re: No Cost Extension; Agreement No. 593517, Task 5

Dear Mr. Hamons:

Maryland Environmental Service (MES) is requesting an extension to the term of the above referenced Agreement for the project entitled "Task 5, Evaluation of Public Concerns" for the Sparrows Point Shoreline Reclamation." This is a no cost extension to regenerate the Public Participation.

As you recall, we (MPA and MES) made the decision to postpone the Public Participation activities until the field studies (biological, navigational, and hydrodynamic model)were complete and the information could be presented to the local officials and citizens. These studies are complete and the reports should be finalized in January. In addition, the results of the November elections may require revisiting some of the County offices after the new appointments are made.

We request an extension of the Agreement for Task 5 to June 30, 1995 to pursue this work. Please indicate your agreement by signing on the line below and returning a copy to me.

Sincerely,

Keith D. Tate, P.E.
Program Director
Environmental Dredging Program

Approved: _____
Frank L. Hamons

cc: Nancy Balenske

SEE PONY

2011 Commerce Park Drive • Annapolis, Maryland 21401 • 410/974/7281 • Fax 410/974/7267

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REPORT TO CITIZENS COMMITTEE
PLACEMENT OPTIONS PROGRAM
SPARROWS POINT SHORELINE RECLAMATION

March 2, 1995

A. Working Group Meeting - 2/8, 3/1, 4/15, 5/10, 8/10, 12/2/93

B. Status of Project

1. The results of the biological studies indicate that Sparrows Point is representative of the conditions found throughout the Baltimore Harbor/ Patapsco River. The studies show that, like the Harbor, the area around Sparrows Point has improved in recent years.

2. The investigations of using upland properties at Sparrows Point are continuing. The current administrators at Baltimore County Economic Development Commission, Department of Environmental Protection and Resource Management, and Bethlehem Steel Corporation are interested in pursuing a project for the upland sites.

A potential use of Site 2 (the old pipe mill) is as a drying basin for the reuse of dredged material. Options for reusing the materials include brick, construction aggregates, and topsoil. The concept of a recycling the material envisions a drying area which receives 1 - 2 feet of materials. The placed materials are dewatered, dried, and removed from the cell for use. MPA is investigating the options for recycling dredged materials.

Bill, Can we say this to site?

REQUEST FOR TECHNICAL PROPOSAL
CONTRACT NO. 593949
ENVIRONMENTAL AND ENGINEERING INVESTIGATION AND DESIGN
FOR
BETHLEHEM STEEL SHORELINE RECLAMATION

I. GENERAL

The Maryland Port Administration (MPA) with the assistance of the Maryland Environmental Service (MES) is seeking professional environmental and engineering services to perform an Environmental and Engineering Evaluation and Design for Bethlehem Steel Shoreline Reclamation to develop wetland and upland habitat at Sparrows Point, Maryland using dredge material from the approach channels to Baltimore Harbor. Early efforts of the Consultant services will include, but are not limited to, environmental and engineering investigations to the level of Preliminary Engineering Design and Draft Permit Applications. These efforts will be the basis for subsequent preparation of Final Permit Applications and Construction Plans and Specifications.

II. SCOPE OF SERVICES

Consultant shall furnish all labor, supervision, materials and equipment necessary to perform the work specified in the attached Scope of Work.

All such work performed under this Contract shall be done in accordance with the specifications and terms specified herein and Maryland Department of Transportation (MDOT) General Conditions for Consultant Agreements 1989 and Amendments 1 and 2 appended hereto and made part hereof.

III. CONSULTANT'S RESPONSIBILITY

Consultant shall assign personnel to perform environmental and engineering investigations in the areas mentioned hereinabove. Such work shall be performed under the supervision of the MPA or the MES Project Manager as designated by the MPA. All work performed under this Contract shall be done in a manner and method to the complete satisfaction of the MPA.

The work shall be comprised of detailed environmental and engineering studies in general areas outlined on the attached Scope of Work. Based on the results of these efforts, the Consultant may be requested to prepare Detailed Construction Plans and Final Permit Applications. The Consultant shall prepare cost estimates for construction, develop the methodologies for filling the facility, and developing the wetland and upland habitats. The Consultant shall also assist in obtaining all required Permits.

IV. PROJECT TERM

The term for the Project is fifteen (15) months, beginning approximately June 1993 and ending about September 1994. The Consultant, MES, and MPA will mutually agree upon completion times for various phases of the Project. It is understood, however, that the conduct of all or any of the tasks and phases will be as prompt as possible, based upon an approved schedule.

V. COST RANGE

The estimated total cost for services sought is between $1.1

million and $1.8 million.

VI. METHOD OF PAYMENT

Compensation will be on the basis of cost plus fixed fee.

VII. PROJECT ADMINISTRATION

A. The MPA will issue a written Notice to Proceed to the Consultant. The MPA will designate a Project Manager from MES in the Notice to Proceed. All work performed by the Consultant shall be supervised by the Project Manager.

B. Within one (1) week after receipt of a written Notice to Proceed issued by the MPA, the Consultant will initiate the Project and will prosecute the work in accordance with the tasks specified and to the satisfaction of the Project Manager, unless otherwise directed by the MPA or MES.

C. At all meetings attended by the Consultant and pertaining to the Project, the Consultant shall be responsible for taking the minutes on all topics discussed and dispositions or conclusions reached. The Consultant shall submit a formal set of meeting minutes to the Project Manager for approval within one week after the meeting.

D. All telephone conversations relative to instructions and/or authorizations from MPA or MES to the Consultant

must be confirmed in writing by the Consultant and submitted to the Project Manager for approval.

E. No modification to the Scope of Work or extra work will be authorized unless approved in writing by the MPA.

F. Copies of all written correspondence between the Consultant and any party pertaining specifically to the project shall be submitted to the Project Manager for his records within one (1) week of the receipt or transmission of such correspondence, with a copy to MPA.

G. The Consultant shall conduct monthly progress meetings with MPA and MES which shall be scheduled within five (5) working days after the submittal of the monthly progress report to the Project Manager with a copy to MPA. The monthly progress reports will describe the activities for the reporting period, including work performed on each work element, problems encountered, man hours expended by each member of the Consultant's firm, and the total dollar expenditure on the Project by work element and assignment. Progress reports shall be submitted within five (5) working days of the close of the reporting period. Copies of applicable progress reports shall be attached to the invoices when submitted for payment.

H. The Consultant's work shall be under the direction and control of the key personnel identified in the Technical Proposal. Any changes in the key personnel shall be subject to review and written approval by the MPA.

VIII. MINORITY BUSINESS ENTERPRISES

It is the goal of the Maryland Department of Transportation (MDOT) that certified minority business enterprises participate in a minimum of thirteen percent (13%) of the total dollar value of this Contract.

XI. PROPOSAL SUBMISSIONS

Eight (8) copies of the Technical Proposal must be submitted not later than 4:00 PM, local time, Monday, April 12, 1993 addressed to:

S. Donald Sherin, Chief
Bureau of Consultant Services
Room 414
707 North Calvert Street
Baltimore, Maryland 21202

Proposals received after this time will not be considered.

X. PRE-PROPOSAL MEETING

All firms on the reduced candidate list are required to attend a pre-proposal conference scheduled on Tuesday, April 6, 1993 at 2:00 PM at the Maryland Port Administration, Office of Harbor Development, Point Breeze Maritime Center II, 2310 Broening Highway, Baltimore, Maryland 21224. If you have any questions, contact Frank Hamons, Manager of Harbor Development. The purpose of this conference is to answer any questions that such firms might have regarding the project or the proposal to be submitted.

XI. PROPOSAL EVALUATION

Proposals will be evaluated for conformance with the Request

for Proposal (RFP) and to determine which firm is considered most qualified to perform the services. Each element required in Section XII. of this RFP will be evaluated separately, but the elements may not carry equal weight, but are listed in order of importance for evaluation purposes.

Technical Proposals will also be reviewed for consistency with the firm's Letter of Interest submitted earlier by each firm indicating the prime participant or participants, and the areas of involvement of each of the named subcontractors. Any substantial modification in either composition or areas of involvement from that shown in the firm's earlier statement is grounds for disqualification of the proposal. However, upon a showing of compelling justification, the Consultant Selection Committee may accept the proposal, as modified, if this is determined, at the Committee's discretion, as necessary.

The selection shall be based on an evaluation of the Technical Proposals, oral interviews, and subsequent price negotiations which will be initiated with the firm which has submitted the highest rated Technical Proposal. Oral interviews will be held on Friday, April 16, 1993 at 10:00 AM at Maryland Port Administration, Point Breeze Maritime Center II, Conference A (2nd floor), 2310 Broening Highway, Baltimore, Maryland 21224.

XII. REQUIREMENTS OF THE TECHNICAL PROPOSAL

The Technical Proposal shall include an Understanding of this RFP discussing the extent of work being sought by the MPA, and the

firm's ability to perform the work required in a timely manner. The proposal shall also include examples of previous similar work. The major factors/criteria for selection of the Consultant for this project, in descending order of importance, will be:

- Detailed qualifications and experience of principals and key staff assigned to the project. (Prime Participant(s) and Subcontractor(s).)
- Technical approach, including methodology. (By specific tasks and overall.)
- Management approach, including organization and key staff assignments. (By specific task and overall.)
- Work plan and schedules. (By specific tasks and overall.)
- Comments on scope of services and estimates of the percentages assigned to each of the tasks of the scope of services.
- Availability of key staff. (Prime participant(s) and Subcontractor(s).)

XIII. ADDITIONAL REQUIREMENTS/INFORMATION

- An executed "Bid/Proposal Affidavit" is required. (Prime Participant(s)).
- Evidence must be furnished for financial capacity to provide the services and to protect the State from errors and omissions. (Prime Participant(s)).
- All applicable MBE requirements will be enforced.

- All applicable Federal and other requirements will be enforced.
- The Consultant shall set forth his understanding of the project, specifications, and produces to be furnished and MPA's Scope of Services need not be repeated in the technical proposal.
- All firms submitting proposals grant to the State a non-exclusive right to use, or cause others to use, the contents of the technical proposal or any part thereof for any purpose.
- Compliance is required with the "General Conditions for Consultant Contracts - 1989 " included hereinafter. These "Conditions" promulgated by the MDOT, will be made part of a contract agreement with the successful Consultant.
- An executed Minority Business Affirmative Action Certification (attached) is required.

XIV. CONSISTENCY WITH LETTER OF INTEREST

The Technical Proposal will be reviewed for consistency with the Letter of Interest statement submitted earlier by the Consultant indicating the prime participant or participants, and the areas of involvement of each of the proposed subcontractors. Any substantial modification in either composition or areas of involvement from that shown in the Consultant's earlier statement is ground for disqualification of the proposal. However, upon a

showing of compelling justification, the Consultant Screening Committee may accept the proposal as modified, if the reasons set forth for such modification are, at the MPA's determination, adequate to properly justify the change. The justification shall be set forth in the Transmittal Letter for the Technical Proposal (i.e., XVI, below).

If the Consultant includes additional firms in his Technical Proposal that were not included in the Expression of Interest, the Consultant must include a standard SF 254 Form for the added firm(s).

XV. MANAGEMENT & ADMINISTRATION OF PROJECT

A. Transmittal Letter

The Consultant shall prepare a letter of transmittal, as a part of the Technical Proposal, to transmit the Technical Proposal to the MPA. This letter shall be signed by the person or persons required to legally bind the Consultant to the proposal.

The Technical Proposal transmittal letter shall specifically state that the Consultant shall complete all Project services, within the proposed time estimate, to the satisfaction of the MPA. Also, any justification or explanatory material relevant to the Technical Proposal shall be set forth in this letter. The letter shall be concise and not repeat any of the detailed information found elsewhere in the Technical Proposal.

understanding of what work is to be accomplished. Special requirements of the project should be discussed and any unique circumstances or suggestions should be presented. The Scope of Services should be summarized sufficiently to demonstrate the Consultant's understanding of the project and shall not exceed eight (8) pages.

The Consultant shall set forth how he proposes to accomplish the scope of services. Specifically, the Consultant shall address the methodology, techniques and processes he proposed to use. This section shall contain work schedules.

5. Example of Similar Work

   a. Prime

   b. Subcontractors

   Similar projects shall be limited to eight (8), including value of work performed on two (2) standard pages for all projects.

6. Key Staff

   a. Prime

   b. Subcontractors

   Key staff is defined as the productive staff which have major project responsibilities. The <u>total</u> key staff

proposed shall not exceed eight (8) individuals for the project. On the first page of this section, the Consultant shall indicate the key staff anticipated to be assigned to the project. Following each key staff individual listed, the Consultant shall set forth the specific responsibilities of each individual within the Project. The Consultant shall submit a one (1) page resume for each key staff individual, showing both general experience and specific experience related do the subject project.

The Consultant may show an organization chart of proposed personnel in this Section. The Consultant may also include in this Section a listing of support personnel proposed, including items such as names, degrees, registrations and expertise, limited to three (3) lines for each individual. Resumes of support personnel are not to be included.

7. Manpower Estimates - Manpower estimates expressed as a percentage of specific categories of effort compared to the total, e.g. principles, project management, technical, drafting, administrative, etc. (by

specific tasks and overall).

XVI. INSURANCE REQUIREMENTS

The requiring of any and all insurance as set forth in this document, or elsewhere, shall be in addition to and not in any way in substitution for all the other protection provided under the Contract Documents.

No acceptance and/or approval of any insurance by the Maryland Port Administration, and/or the Project Manager, shall be construed as relieving or excusing the Consultant, from any liability or obligation imposed upon either or both of them by the provisions of the Contract Documents.

The Consultant shall at all times during the term of this contract, and until it has received Notice of Final Acceptance by the Maryland Port Administration, maintain in full force and effect the policies of insurance required by this Section. The Consultant, if requested by the Maryland Port Administration, shall provide certified true copies of any or all of the policies of insurance to the Maryland Port Administration.

The Consultant shall not commence work under this contract until he has obtained all the insurance required under this section and such insurance has been approved by the Administration, nor shall the Consultant allow any Subcontractor to commence work on his subcontract until the insurance required of the Subcontractor has been so obtained and approved.

All insurance policies required by this Section, or elsewhere

in the Contract Documents, shall be so endorsed as to provide that the insurance carrier will be responsible for giving immediate and positive notice to the Administration in the event of cancellation or restriction of the insurance policy by either the insurance carrier or the Consultant, at least thirty (30) days prior to any such cancellation or modification.

A. Workmen's Compensation

1. The Consultant shall maintain Workmen's Compensation insurance as required by the laws of the State of Maryland, and shall include Employer's Liability coverage with a minimum limit of $500,000 each accident, $500,000 disease - each employee and $500,000 disease - policy limit.

B. Comprehensive General Liability

The Consultant shall maintain Comprehensive General Liability insurance in the following limits: $1,000,000 each occurrence for Bodily Injury Liability including death; and $1,000,000 each occurrence for Property Damage Liability.

Such insurance shall also include the following coverage in the limits specified herein:

1. Contractual Liability to cover liability assumed under this contract.
2. Products/Completed Operations Liability

C. Comprehensive Automobile Liability

Limits of Liability: $500,000/$1,000,000 Bodily Injury

$1,000,000 Property Damage

In addition to Owned Automobiles, the coverage shall include Hired Automobiles and Non-Owned Automobiles with the same limits of liability.

D. Scope of Insurance and Special Hazards

The insurance required under sub-paragraphs (A), (B) and (C) above shall provide adequate protection for the Consultant against claims which may arise form operations performed by the Consultant or by anyone directly or indirectly employed by him, and also against any special hazards which may be encountered in the performance of this contract.

E. Subcontractor's Insurance

If any of the work under this Contract is subcontracted, the Consultant shall require the subcontractors, or anyone directly or indirectly employed by any of them to procure and maintain the same coverage in the same amounts specified above.

F. Other Coverages Required

Architect's/Engineer's Professional Liability (Errors & Omissions) amount to be negotiated with the MPA, but in no case less than $1,000,000.00.

Evidence that the required insurance coverage has been obtained may be provided by Certificates of Insurance duly issued and certified by the insurance company or companies furnishing such insurance. Such

this Contract. The Project Manager may request at any time, and the Consultant shall promptly furnish upon such request, true and exact copies of all policies of insurance affording the coverage required herein, and any endorsements or changes thereto.

SPECIAL NOTE

If the Consultant recommends any additions which, in its opinion, should be included in the scope of work of this project, the Consultant is encouraged to include a discussion of the recommended additional work in its proposals. The recommendation must be described in the same detail as the other portions of the Project. The Consultant must include the recommended additional work as an "add-on" to be included or disregarded by the MPA, at the sole discretion of the MPA.

March 25, 1993

permits:ae_rfp

COMMUNITY RELATIONS PLAN
FOR BETHLEHEM STEEL PROJECT

STRATEGY: **To conduct small informal briefings with local elected officials, area community, business and environmental leaders in an effort to garner their support for the project. Their endorsement of the project will work to influence the community's acceptance. The meetings will immediately begin to be scheduled.**

STEP ONE: *Brief Local Elected Officials*
Briefing should be held for each official

Senator Norman Stone

Delegate John Arnick

COUNCILMAN ~~Delegate~~ Louis DePazzo

Delegate Connie Galiazzo

Councilman ~~Don Mason~~

STEP TWO: *Brief Environmental and Business Groups*

Hart-Miller Island Oversite Committee (Tom Kroen)

Greening of Dundalk Committee (Diane Pinter)

Dundalk and Eastern Baltimore County Area Chamber of Commerce (Patricia Winter)

Edgemere/Millers Island Businessmen's Association (Jim Montgomery)

STEP THREE: *Brief Community Groups*

North Point Peninsula Co-Coordinate Council (Virginia Talbert)

Greater Dundalk Community Council (Alice McKay)

Wells McComas Improvement Association (Janet Wood)

Millers Island Community Association (Bob Ward)

02/27/92

DNR COMMENTS
MDE

6 UPLAND ROAD
BALTIMORE, MARYLAND 21210
PHONE: (410) 235-3926
FAX: (410) 889-4980

June 7, 1995

Mr. Jeff Jefferson
Public Relations
Baltimore Gas and Electric Company
1000 Brandon Shores Road
Baltimore, Maryland 21226

MARLEY NECK CHANGE NAME

Re: ~~PORT~~ ENHANCEMENT PROJECT

Dear Jeff,

As you suggested, the following is a resume of our trip with an outline of the proposal for the ~~PORT~~ ENHANCEMENT PROJECT, its benefits and a preliminary scope of tasks necessary for further discussions.

I feel certain that this is only a seed thought and that when BGE & MPA look at the overall picture, with the knowledge they can bring to such an undertaking, they will find many more sophisticated and innovative ways in which to create great advantages for all concerned.

Purpose: To introduce concerned parties, as copied below, to a concept that would utilize flyash generated by Marley Neck coal fired faciliites of BGE mixed with dredge spoil from MPA Harbor dredging. This plan would remove the water from the spoil while stabilizing the site for future use as a ~~PORT~~ ENHANCEMENT PROJECT. MARLEY NECK

Suppositions: MPA recently acquired an ~~80~~ 72 acre disposal site and is negotiating with Cox Refining for an additional similar size site situated immediately north of the BGE power generating facilities. MPA has an interest in consolidating existing dredge material, dewatering and stabilizing the ~~spoil~~ MATERIAL for utility and conservation of capacity.

BGE currently produces approximately 500,000 cy of flyash from its coal fired generating facilities. HOW OFTEN?

A YEAR

.../

This material is currently being disposed of as structural fill on BGE properties in the Marley Neck area. This material has excellent stabilizing traits when a moisture content is elevated to 20% and is placed in multiple lifts as part of the fill. Properly placed the resultant fill can easily support loadings in excess of 4,000 lbs./sf. BGE recently entered a contract, with Reliable Contracting Co. for disposal of a portion of the flyash at a quarry near Crofton, with an estimated cost of $10.00/cy for transportation and disposal fee.

& PROPERTY OWNER

The citizens in the Marley Neck area continue to be concerned with the BGE's disposal of flyash in their neighborhood, although they were successful in legislating some safeguards as to aesthetics. The citizens continue to pursue alternatives that will remove the disposal of flyash from their community and protect the environment.

BATTERY CLINE

WHERE WOULD MATERIAL COME FROM

Proposal: Consideration should be given to the construction of a clay core dike in a southernly direction from the existing southeast corner of the MPA disposal facility to a point approximately 1,000 feet offshore and 5,600 feet south of the existing dike, and then westerly 1,000 feet to the shore near the existing coal pier for BGE. This approximately 200 acre area has an average water depth of three (3) feet and at elevation sixteen ~~(16)~~ feet which is the existing height of the MPA dike, would provide for a capacity of 6,000,000 cy. At a design height of (24) twenty four feet the capacity would be estimated at 8,500,000 cy. Based on past studies by Environmental Concern out of St. Michaels, this shallow water is not a high value habitat, and the rewards associated with this proposal could be appreciable for all parties.

WHERE?

20

WIB?

Benefits: BGE could utilized the facility for disposal at a price less than current contract.

2

2

Flyash would provide for a beneficial use instead of a disposal problem. This pilot program could develop a new use of the flyash and create an active market along the east coast in association with dredge disposal.

SP. PT. PROJECT

Site is immediately adjacent to the BGE plant which would permit on site hauling without impacting the roads or the community. Thus, disposal at this location would eliminate the continued opposition of the neighbors.

This mixing of highly absorbent flyash with diluted dredge spoil may provide an effective dewatering method at a reduced cost.

The combination of the two materials should produce a stabilized structural fill for reuse as a Port facility, providing more than 500 acres of back up land, and an important economic advantage for both the State and Anne Arundel Co. through the future use of a greatly expanded Port Facility.

Scope of Preliminary Work:

MPA - figure the costs of the infrastructure to build a clay lined dike and a schedule of capacity

BGE - estimate the percent of the mixture of flyash needed to stabilize the ~~spoil~~ material

AACo - evaluate the wetlands and alternative restitution site - alternative for outfall of Swan Creek

Hopefully, the various agencies will find that this ~~PORT~~ **ENHANCEMENT PROJECT** will be mutually beneficial and that they will be willing to investigate the elements mentioned above and find many more advantages while studying these possibilities.

Thank you for your willingness to join this exploratory voyage. I look forward to receiving the comments and research data from the various concerned parties.

Sincerely,

Jane Nes

Mrs. Pumphrey Nes

Enc. 2
JPN/lmu
cc: see sheet .../4

.../

cc: Thomas Andrews, Land Use and Environment Officer
Anne Arundel County
2662 Riva Road
Annapolis, Maryland 21401 (410) 222-7502

James J. Pittman, Deputy Director
Waste Management Services
Department of Public Works
Anne Arundel County
2662 Riva Road
Annapolis, Maryland 21401-7374 (410) 222-7425

Frank Hamons, Manager of Harbor Development
Maryland Port Administration
Point Breeze
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224 (410) 631-1102

William J. Lear, Port Planner
Port Planning Division
Maryland Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224-6621 (410) 631-1140

David Bibo, Supervisor of Disposal Operations
Maryland Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224 (410) 631-1102

Glenn P. Nilsen, P.E.
Engineer - Coal Ash Management
Environmental Services
Baltimore Gas and Electric Company
1000 Brandon Shores Road
Baltimore, Maryland 21226 (410) 787-6475

Jeffrey Rein
Water Management Administration
Maryland Department of the Environment
2500 Broening Highway
Baltimore, Maryland 21224 (410) 631-3752

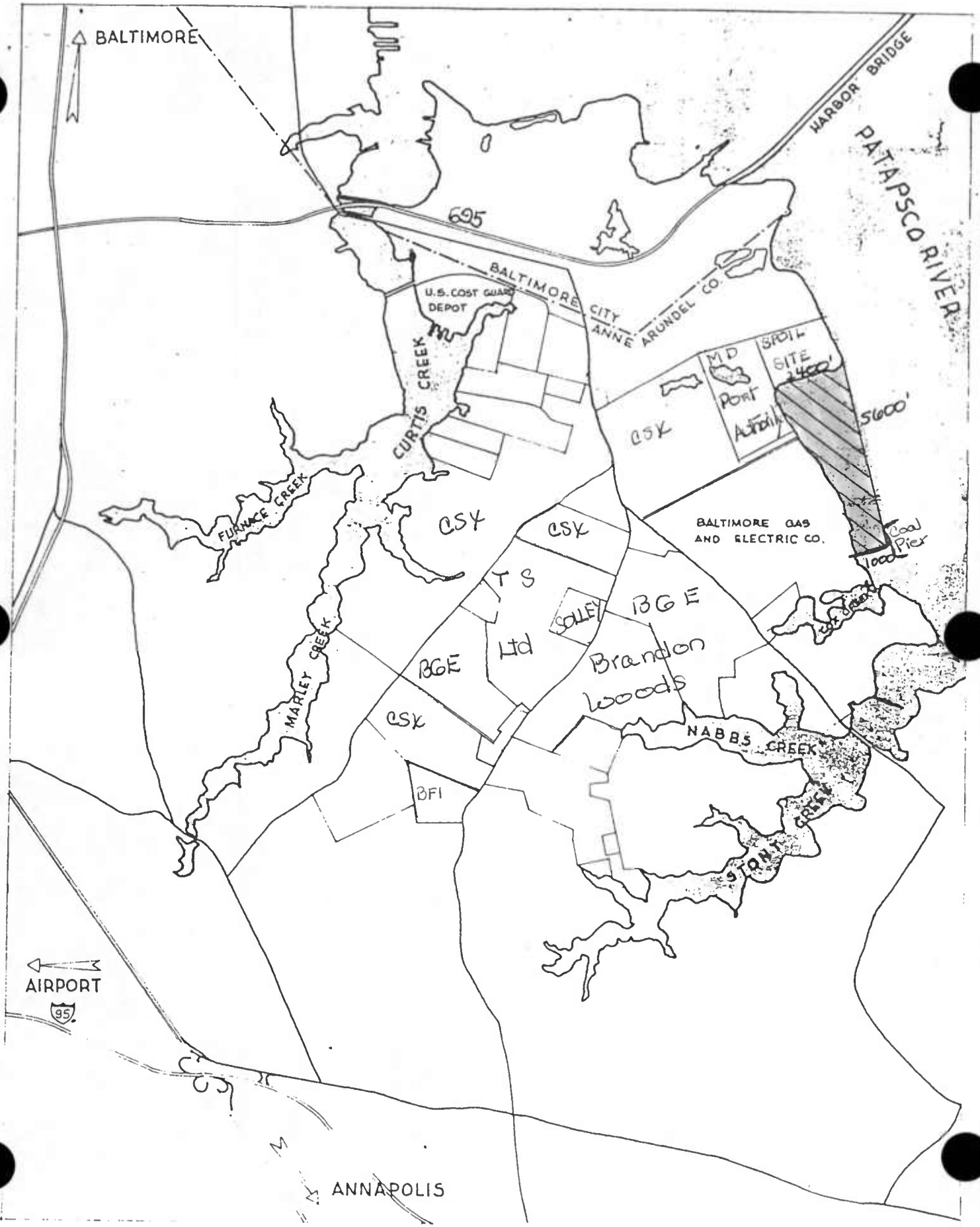
.../

Thomas Redmond, County Councilman
Anne Arundel County
8224 Baltimore & Annapolis Boulevard
Pasadena, Maryland 21122 (410) 360-0000

Tom Grasso, Maryland Executive Director
Chesapeake Bay Foundation
162 Prince George Street
Annapolis, Maryland 21401 (410) 268-8833

David Lancaster, Vice President
CSX Real Property
901 E. Cary Street, 18th Fl.
Richmond, Virginia 23219 (804) 782-1491

Mary Rosso
Coalition of Communities and Citizens Against Flyash
845 North Shore Drive, Silver Sands
Glen Burnie, Maryland 21061 (410) 255-7021


BALTIMORE
HARBOR BRIDGE
PATAPSCO RIVER
695
BALTIMORE CITY
ANNE ARUNDEL CO.
U.S. COST GUARD DEPOT
CURTIS CREEK
FURNACE CREEK
MARLEY CREEK
MD PORT AUTH
SPOIL SITE
2400'
5600'
CSX
CSX
CSX
CSX
BALTIMORE GAS AND ELECTRIC CO.
Coal Pier
1000'
T S
Ltd
SALLEY
BGE
BGE
Brandon Woods
NABBS CREEK
BFI
STONY CREEK
AIRPORT
95
ANNAPOLIS

LETTER

CSX SITE
UNDER CONSTRUCTION

C.A. Dutch Ruppersberger, III
Baltimore County Executive

Executive Office
400 Washington Avenue
Towson, Maryland 21204
(410) 887-2450
Fax: (410) 887-5781

July 14, 1995

Ms. Tricia Slawinski
Maryland Port Administration
The World Trade Center
Baltimore, Maryland 21202-3041

Dear Ms. Slawinski:

This letter is a follow up to our June meeting regarding the Maryland Port Administration's request for utilization of the Bethlehem Steel optioned property to Baltimore County.

Our staff has met internally regarding the potential use by the M.P.A. of Site 2B. The County Executive has charged the Economic Development Director, Bob Hannon, with developing a property marketability study within 60 days. The marketability study will attempt in part to single out potential uses for the 2B Site.

Once again, it should not be construed that the County Executive or Administration has given approval of the site for dredge spoils.

If you have questions regarding the above information, please feel free to contact me at 887-4108.

Sincerely,

Robert R. Staab
Chief of Operating Policy

RRS:mab

c: Ms. Virginia W. Barnhart
Mr. J. James Dieter
Mr. Robert L. Hannon
Mr. Merreen E. Kelly
Hon. C.A. Dutch Ruppersberger

MARYLAND PORT ADMINISTRATION
OFFICE OF HARBOR DEVELOPMENT
FACSIMILE TRANSMITTAL

TO: MICHELLE VARGO

FAX NO:

FROM: BILL LEAR

DATE: 20 JULY 95

There are 2 pages, including this cover sheet. If there are any problems, please call me at (410) 631-1102. My fax number is (410) 631-1057.

Comments/Special Instructions:

MICHELLE -

F.Y.I

THANKS

BILL

Please copy to:

W. Hea

MARYLAND
ENVIRONMENTAL
SERVICE

Parris N. Glendening
Governor

James W. Peck
Director

June 13, 1995

Mr. Frank L. Hamons
Manager, Harbor Development
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224

RE: Contract No. 294904/Pin No. 600105P
Environmental, Administrative and Technical Services
Task 5 - *Sparrows Point Reclamation Project: Evaluation of Public Concerns*

Dear Mr. Hamons:

With reference to the MPA/MES pre-meeting for the Sparrows Point uplands placement options meeting on June 9, 1995, and the meeting with Baltimore County representatives on June 12, 1995, the Maryland Environmental Service (MES) requests a modification to the term of Contract Number 294904, PIN No. 600105P, for the task entitled EATS Task 5, *Sparrows Point Reclamation Project, Evaluation of Public Concerns*. The duration for this amendment would be June 30, 1995 to August 31, 1995.

The purpose of the requested term extension is to allow for (1) exploration of public support of upland and wetland placement options at Sparrows Point that was requested by Baltimore County representatives, (2) preparation of the proposal that you requested for a pilot study to evaluate the option of manufacturing soil from dredged material as a result of the aforementioned pre-meeting and meeting, and (3) for provision of sufficient time for MPA to review and markup draft biological, navigational and hydrodynamic modeling studies that will be delivered in June and for subsequent MES inclusion of MPA requested refinements into a final report.

It is estimated that Fiscal Year 1995 funds that were budgeted for Task 5 will be sufficient to complete action on deliverables as well as the two additional subtasks. However, unexpended Fiscal Year 1995 funds will need to be rolled over into Fiscal Year 1996 to enable completion of the project, as modified. The rollover will be reflected in our FY 95 closeouts for Task 5.

Please indicate your agreement for the requested term extension by signing on the line below and returning a copy to me.

Sincerely,

Wayne Young
Program Director
Environmental Dredging

Approved: _____

Frank L. Hamons, Manager
Harbor Development
Maryland Port Administration

cc: Robert Miller
Anthony Serio
Nancy Balenske
William Lear
Michelle Vargo
Robert Smith
Pam McDonagh

MONTHLY PROGRESS REPORT

JULY 1995

PROJECT: APG, OTHER UPPER BAY and SPECIAL ASSIGNMENTS

MANAGER: Jerry Savage

CLIENT: Maryland Port Administration

CONTRACT AMOUNT: $54,779

CONTRACT TERM: August 22,1994 to August 21,1995

PROJECT TYPE: Federal Coordination, Environmental, Administrative and Technical Services

STATUS: This month's report includes APG activities; other POP actions; and Special Assignments. Reports on each follows:

1. APG - A comprehensive report has been developed for the DNPOP Management Committee meeting on August 2. This was presented to the Working Group on July 20, with the Group recommendation to encourage the management committee to take a proactive approach for timely resolution of the UXO problem and related CERCLA issues. A copy of the report and chronology of APG events is attached. Steve Wampler and Joe Craten will represent APG at the Management meeting.

2. Other POP - Roy Weston provided a letter, copy attached, concerning their availability and interest in performing an update of the 1974 study titled "The Technical and Economic Feasibility of Producing Beneficial Products From Baltimore Harbor Dredged Spoil". A current economic and marketing study of the cost effectiveness of lightweight aggregate production would be in the $40,000 to $50,000 range. Roy Weston requests an early August meeting with MES and MPA to discuss a proposal.

3. Special Assignments - On July 20, I provided a summary and status report on appropriations and anticipated Senate action on WRDA 95. Continuing concern on FY 96 funding for Poplar Island resulted in requests for memos on cost sharing and non-Federal funding options which I provided on July 27. The Senate appropriations bill has not increased the $2.5 million in Section 204 funding, although appropriations staff advises they are "working with the State" on the Poplar funding issue. The memos I provided advise that Section 204 guidance does not provide for in-kind services, and that WRDA '86 provides the basis for non-Federal design and construction. Both issues rely on authorization for non-Federal credit and reimbursement, and I recommend a meeting with HQUSACE officials to better define non-Federal design and construction procedures. Copies of the three memos are attached.

MONTHLY PROGRESS REPORT

JULY 1995

PROJECT: APG, OTHER UPPER BAY and SPECIAL ASSIGNMENTS

4. Budget Status: July 31, 1995 (MPA Contract No. 595940 executed July 11)

Total	$ 54,779
Expended	$ 45,927 (June 30)
Remaining	$ 8,852

REPORT TO THE MANAGEMENT COMMITTEE
DREDGING NEEDS AND PLACEMENT OPTIONS PROGRAM
ABERDEEN PROVING GROUNDS PLACEMENT OPTIONS

August 2, 1995 Meeting

I. BACKGROUND

Identification of placement options within the water and land area controlled by the Aberdeen Proving Grounds (APG) has received considerable attention within the Dredging Needs and Placement Options Program (DNPOP) since the program's inception. This attention has been driven by the facts that APG controls virtually the entire western side of the northern Upper Chesapeake Bay along 31 miles of deep draft navigation channel (Figure 1). The installation controls about 80,000 acres of which about 40,000 acres is water area. Mr. Gerard Savage, on interagency assignment from the U.S. Army Corps of Engineers, was made available to the Maryland Port Administration (MPA) and the Maryland Environmental Service (MES) to assist in the advancement of APG options. A structured approach was subsequently developed to advance APG placement options (Figure 2). A chronology of direct and related activity is attached (Attachment 1). Over the past 12 months, the continued non-availability of Phase I placement options increased the emphasis on finding and using placement sites within the water area controlled by Aberdeen Proving Grounds (APG). The cooperative working relationship with the APG staff has grown steadily during the period and has contributed to a growing recognition that dredged material has the potential for use within the installation restoration program (IRP) for shoreline stabilization, habitat restoration, and encapsulation of hazardous materials and unexploded ordnance (UXO) to prevent its migration or exposure to the Bay.

II. RECENT DEVELOPMENTS

A. Development of Placement Concepts.

1. Coordination among representatives of APG, MPA, MES, Baltimore (BDCOE) and Philadelphia Districts (PDCOE) of the Army Corps of Engineers, Environmental Protection Agency (EPA), Maryland Department of the Environment, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration/National Marine Fisheries Service, Maryland Department of Natural Resources, and Maryland Geological Survey resulted in the identification of potential placement opportunities at Graces Quarters and J-Field and the potential for additional sites. Placement concepts were developed for both Graces Quarters (Figure 3) and J-Field (Figure 4), with the J-Field option showing the most promise for near-term

implementation. Consideration of Graces Quarters has been discontinued because of low capacity, access and placement problems, and the existence of prime tiger beetle habitat.

2. The J-Field option is of particular interest to the APG staff . It offers a technically feasible and cost-effective alternative for (1) preventing the breach of a berm that protects a unique freshwater wetland and minimizes the potential for communication of contaminated groundwater with the Bay and (2) encapsulation of UXO.

3. As the result of an interagency meeting, MES and MPA agreed to make a presentation to the APG Citizens Advisory Committee concerning the DNPOP program interest in APG placement sites. The plan was to present the J-Field concept as a prototype project for practical application of dredged material for conservation, CERCLA cleanup, and for providing a practical solution for UXO remediation.

4. The Bay Enhancement Phase II Working Group conducted a preliminary assessment of both the Graces Quarters and J-Field options. Both options were highly regarded from technical and environmental perspectives. The J-Field concept was considered technically feasible for near-term implementation.

B. Impediments to Option Implementation.

1. *CERCLA Liability Issue.* The Edgewood area of APG (including Graces Quarters and J-Field) is a designated CERCLA (Superfund) site. Any placement of dredged material in this area would need to be incorporated in the IRP in order to avoid CERCLA liability questions. EPA Region III has advised that there is precedence for use of fill material as part of an IRP and that the J-Field option could be developed accordingly as an interim remediation action. Thus, the CERCLA issue appears resolvable so as to enable the J-Field project to proceed, with the timing of CERCLA approvals determining whether or not the project could be implemented in the near term.

2. *UXO Issues.*

- Unexploded ordnance (UXO) including chemical munitions exist throughout the APG water area. The J-Field site is believed to be lightly contaminated with UXO. Technology exists, albeit expensive, for locating the UXO and removing it as a component of any excavation that might be performed in conjunction with placement of dredged material

(e.g., on-site filling of geotubes).

- Currently, there is no national or Department of Defense policy guidance regarding appropriate cleanup or other safeguards (including the suitability of encapsulation as a permanent solution). (EPA is currently formulating policies but the completion date is most uncertain.) There are also uncertainties regarding the potential for incurring liability as a result of placement activity. If removal of the UXO were required once it was encapsulated, it might become necessary to disturb or otherwise harm created habitat to achieve this objective. If the CERCLA liability approach were ultimately applied to UXO, the parties involved in habitat creation could potentially be required to participate in the UXO cleanup.
- PDCOE, BDCOE, MPA and MES have concluded that the uncertainty associated with the UXO liability issue has delayed implementation of APG shoreline stabilization and habitat creation projects indefinitely and believe that this impediment should be considered a possible fatal flaw for near-term and perhaps mid-term implementation.
- It is uncertain as to whether or not the UXO liability consideration would also affect the availability of Pooles Island Area "H" (which lies entirely within the APG-controlled area) as a placement site.
- The APG staff has informally indicated disappointment that development of the J-Field project may be delayed. The APG staff has also indicated continuing support for an MES/MPA presentation to the installation's Citizens Advisory Committee concerning the potential use of dredged material in support of the IRP.

III. RECOMMENDED MANAGEMENT COMMITTEE ACTION

The PDCOE, BDCOE, MPA and MES have reached a consensus that implementation of APG options is dependent upon and must await resolution of the UXO liability issue through promulgation of policy and federal rulemaking, which should be monitored. Although the commitment of resources to detailed project planning and development does not appear warranted at this time, it is recommended that the Management Committee endorse maintaining an open window with APG for encouraging resolution of the UXO issue and for advancing placement options when conditions are more favorable.

Prepared by: Wayne Young, MES
Gerard Savage, MES
July 17, 1995

Attachment 1
Firgues 1 - 4

Attachment 1.

APG Shoreline Placement Options
Chronology

April 14, 1994 - Pooles Island Beneficial Use Working Group - Meeting No. 7

- Screened 12 alternatives developed by PCOE. APG advised priorities are:
  1. J-Field
  2. Graces Quarters
  3. I-Field
  4. Hawthorne Cove

  APG ruled out Pooles Island project. Any alternative could drop out due to CERCLA clean up work.

- Meeting No. 8 scheduled for July. (Meeting # 7 was last meeting of work group.)

July 11, 1994 - MOU signed by MDE and APG.

- Promotes Federal/State partnership in preservation and restoration of APG's environmental resources.

July 14, 1995 - Federal Agency Agreement on Ecosystem Management in the Chesapeake Bay.

- Committed installations to support of habitat restoration. Corps given lead on beneficial use projects.

August 25, 1994 - Quarterly coordination meeting.

- Philadelphia COE stated that APG projects are not feasible for the short term due to CERCLA issues.
- MPA indicated the port would initiate discussions with EPA for some areas for beneficial uses.

October 7, 1994 - Meeting at APG (USFWS, BCOE, MPA, MES).

- APG continued to encourage projects for four areas prioritized in April.
- Projects should integrate dredged material into CERCLA clean up activities, through bank stabilization and wetlands creation.
- APG staff would work with USFWS to develop fisheries plan for dredged material placement.

APG Shoreline Placement Options
Chronology

November 22, 1994 - Meeting at APG (USFWS, PCOE, BCOE, NOAA, EPA, MDE, DNR, MGS, MPA, MES).

- APG and EPA advised dredged material for shoreline stabilization as part of CERCLA clean up would not expose CERCLA liability. However, use of dredged or fill material for other than CERCLA remediation is an open issue.
- APG indicated considerable interest in beneficial uses, but IRP timing is critical.

January 9, 1995 - MPA sent letter to APG Commander requesting partnership in development of beneficial use projects.

March 14-15, 1995 - DOD Conference on Chesapeake Bay.

- Key presentations included Col. Frank Finch, Director, Army Environmental Center on DOD support for environmental remediation and habitat restoration, and Bill Matuszeski on history of Federal Agencies progress in Bay clean up activities.
- APG well represented at Conference. MPA and MES discussed potential projects with APG staff.

March 30, 1995 - Meeting at APG (USFWS, NMFS, DNR, MDE, MES, MPA).

- APG requested MPA and COE development of concepts for J-Field and Graces Quarters.
- USFWS to head work group in development to assure acceptance.
- Benefits are for habitat restoration; shoreline stabilization; and encapsulation to prevent contamination of Bay resources.

April 12, 1995 - MES met with MD DNR and USFWS.

- Agreement to proceed with J-Field project. Resource concerns with Graces Quarters.

May 5, 1995 - MES letter to APG presenting concepts for J-Field and Graces Quarters.

May 9, 1995 - Meeting at APG (MPA, MES).

- APG supports J-Field project development; advises of procedures for Health and Safety plan for UXO removal, <u>if excavation for geotubes is required.</u>
- APG requested clarification of 5-mile rule to work at Graces Quarters.

APG Shoreline Placement Options
Chronology

May 10, 1995 - Interagency meeting (PCOE, BCOE, MPA, MES).

- COE requested to advise on status of IRP at APG and opinion on CERCLA liability.

May 22, 1995 - Meeting at PCOE (EPA, APG, BCOE, PCOE, MPA, MES).

- MES presented an overview of APG sites, including concepts for J-Field and Graces Quarters.

- EPA advised:
  1) The encapsulation of the white phosphorous pits with fill material is sufficient precedent for analagous use of dredged material placement as part of an interim CERCLA remedial action clean up.
  2) Issues needing resolution include:
  - protection of natural resources versus superfund environmental clean-up work;
  - public and environmental acceptability of encapsulation of UXO's.
  - Potential UXO liability (Concern that a liability judgement could be made even when an interagency agreement is executed for such purpose(s)).

- EPA also advised that:
  - new EPA Superfund Regulations are under review, promulgation of these regulations is expected in September 1995.
  - Resolution of on-site encapsulation (containment) as a remediation solution awaits an Army/EPA ruling.

- COE stated that dredged material placement at a CERCLA or UXO site creates a potential for liability. Army and EPA must address the national policy regarding appropriate forms of remediation for UXO's before the UXO liability issue can be resolved.

- APG and EPA advised that:
  - the use of dredged material as part of the installation restoration program for a CERCLA site could be part of the remediation activity, thus not exposing liability. However, timing of CERCLA clean up activities is a critical factor and, although the entire J-Field cleanup has a 5-7 year duration, interim remedial actions could have a short and near-term window (J-Field shoreline stabilization, for example, must fit the CERCLA window).

APG Shoreline Placement Options
Chronology

May 22, 1995 (continued) and

- A dual conservation and CERCLA clean-up activity could be a showcase for the Upper Bay, particularly as a demonstration to the resource agencies the public.
- Risk assessment methodology would address requirements clean-up actions under NEPA and CERCLA.

- APG suggested that as a first step, MES and MPA should present the APG Shoreline alternatives to the APG Citizens Advisory Board

June 1995 - Interagency Meeting (BCOE,PCOE,MPA,MES).

- The UXO liability issue viewed as a possible fatal flaw for near-term placement options.
- The agencies opined that development of APG options should be postponed until such time as encapsulation of UXO's is deemed acceptable for remediation purposes; and liability issues are resolved.

June 1995 - Discussions with APG.

- The APG staff has indicated that it would support continuation of development of APG options by MES and MPA for dredged material placement as part of CERCLA remediation, and the development of an Army/MPA/Corps partnership for that purpose, re-emphasizing that a project could serve as a model for a dual conservation and CERCLA clean up.
- The APG staff has indicated to MES their belief that the UXO issue is not necessarily a fatal flaw.
- The APG staff staff indicated that presentation of the APG Shoreline options to the APG Citizens Advisory Committee would be beneficial in surfacing public and environmental concerns, and could facilitate resolution of the UXO issue.

Steps in the Remedial Action Cleanup Process

1. Preliminary Assessment/Site Inspection
2. Remedial Investigation/Feasibility Study
3. Proposed Plan - Public Comment - Record of Decision
4. Remedial Design/Remedial Action

Remedial actions require extensive sampling programs and detailed studies before a Record of Decision (ROD) can be reached for the entire study area. Sometimes, an interim remedial action is taken to eliminate or reduce possible environmental threats while a thorough evaluation of the entire study area continues. Remedial actions are short-term responses of limited scope and cost.

Roy F. Weston, Inc.
1 Weston Way
West Chester, Pennsylvania 19380-1499
610-701-3000 • Fax 610-701-3186

25 July 1995

FCH

Mr. Wayne Young
Environmental Dredging Program
Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, MD 21401-2995

Subject: Lightweight Aggregate from Baltimore Harbor Dredged Sediments. Market Analysis and Original Study Update.

Dear Mr. Young:

In recent discussions with your Mr. Gerard Savage he expressed an interest in current developments concerning the beneficial use of dredged harbor sediments. Roy F. Weston, Inc. (WESTON.) initially evaluated this concept in a preliminary study titled " **The Technical and Economic Feasibility of Producing Beneficial Products from Baltimore Harbor Dredged Spoil** " dated 28 March 1974 for Maryland Environmental Service. This study confirmed on a bench scale basis the potential to produce lightweight aggregate using dredged sediments as a principal raw material.

WESTON has not been involved, to my knowledge, in any further evaluation of this concept since the original report was produced. We would however be interested in updating relevant portions of the study, particularly those involving the financial and marketing aspects of such study.

WESTON could propose to use the original study as the basis for a new study focused on the economic model of a lightweight aggregate manufacturing and distribution facility.

The main objectives of any such proposal could be to update and evaluate the project's operating cost model, initial capital investment and the regional market for lightweight aggregate products. This focused analysis is a cost effective means of evaluating the economic viability of the lightweight aggregate concept prior to further technical evaluations of the process. This study would be an essential step before additional funds can be committed to refine the manufacturing process through a pilot scale testing program.

WESTON's budgetary estimate for such a study would probably be in $40,000 to $50,000 range. If you have further interest in this offer, I suggest we meet to develop a more detailed scope of work that will suit your needs.

We would be available to meet with the Maryland Port Administration and Maryland Environmental Service in early August at your convenience.

If you have any questions or would like to discuss this further please call me at (610) 701-3724.

Very truly yours,

ROY F. WESTON, INC.

Adolfo G. Murphy
Project Director

AGM:imn

cc: Gerard Savage-MES
M. Cosmos-RFW
H. Woods-RFW
J. Brooks-RFW
J. Daly-RFW

INTER-OFFICE MEMORANDUM

TO: Dave Chapin - MDOT
F. Hamons - MPA

FROM: G. Savage - MES

DATE: July 20, 1995

SUBJECT: FY 96 Federal Priorities - Summary and Status Report

1. The Colloquy provided by Mr. Cardin on July 11, 1995 provides the missing link in obtaining an authorization and appropriations for Poplar, and is the first evidence of a House WRDA 95 bill. Assuming the Senate can restore the Section 204 funding to the Administration's requested $15 million, we can expect that appropriate language and funding would be provided in the Conference report on HR 1905.

2. Today, the Corps should be providing the transcript to the Senate Appropriations on the May 2 hearing, thus providing Corps responses to Senator Mikulski's questions. I thought that a summary and status report would be helpful.

3. Attached are:

a) House appropriations report language, including an extract of the colloquy.

b) Senator Mikulski's questions and answers.

c) WRDA 95 language for Poplar. (probably obsolete, since the Corps was to provide a drafting service for Senator Sarbanes.)

d) Suggested appropriations language for consideration by Senate.

4. The Washington Post reported on July 16, 1995 that "Maryland's Mighty On Capitol Hill Losing Clout". The Congressional delegation has fallen under the new Republican regime on Capitol Hill, and Governor Glendening recognizes that "The loss of the seniority has had a very major, negative impact on Maryland's ability to defend itself under the large policy changes and cutbacks ...". Senators Mikulski and Sarbanes, and Congressmen Cardin, Mfume, Hoyer, Gilchrist, Morella, and Ehrlich are characterized and/or quoted in the article, which concludes with a quote of Rep. Constance Morella saying "If you're going to balance the budget, you're going to have less money, whether you're a Republican or a Democrat. It is not the people. The times have changed."

5. Rep. Morella's statement hits the mark. Maryland's Civil Works appropriations request for FY 96 was modest. However, it was Rep. Cardin's request that got the attention of the

Appropriations Subcommittee; and it was Rep. Hoyer who got language inserted into the House Report; and it was Senator Mikulski who asked the questions for the record; and it is Senator Sarbanes and Senator Mikulski who are seeking appropriations for Poplar Island. Additionally, Mr Cardin advises the House is working on a WRDA authorization for Poplar. Assuming the Senate Appropriations adds funds for Poplar and the House marks up the Water Resources Development Act, the FY 96 Federal Priorities has hit its mark to. Funding would be provided for Poplar and Brewerton; Report Language is provided for Tolchester, Reedy Point and the anchorage relocation; and the Senate hearing record also addresses Sandy Point safety improvements, Hart and Miller Island South Cell restoration, and Upper Chesapeake Bay Dredged Material Management, providing an excellent summary of Maryland's DNPOP and the Corps DMMP. Thus, the Congressional delegation is well represented in the appropriations record in addressing the Federal Priorities.

G. Savage

cc:
W. Young
Bob Miller

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS ACT OF 1996
(HR 104-149, House Resolution 1905)

Corps of Engineers--Civil

General Investigations

Chesapeake and Delaware Canal, Baltimore Harbor Connecting Channels, DE & MD. - In carrying out the Chesapeake and Delaware Canal, Baltimore Harbor Connecting Channels, study, the Corps of Engineers is directed to complete studies concerning improvement of the Reedy Point Flare and relocation of the Arnold Point Anchorage to Howell Point.

Tolchester Channel "S-Turn", Maryland. - The Committee urges the Corps of Engineers to to complete its ongoing studies and related design work pertaining to the dangerous S-Turn in the Tolchester Channel, and to complete its report addressing the economic, environmental and safety concerns of this modification.

Construction, General

Baltimore Harbor and Channels, Maryland - The Committee has provided $339,000 for the Corps of Engineers to complete the Limited Re-evaluation Report for the Brewerton Channel Extension.

Poplar Island, Maryland - The Committee recognizes the national economic importance of the Baltimore Harbor, and therefore urges the Corps to support, out of the funding provided for Wetland and Aquatic Habitat Creation (Section 204 funds), the Poplar Island Restoration Project.

Colloquy

Congressional Record - House July 11, 1995

Mr. Cardin. ... In this Congress we will be working with the Committee on Transportation and Infrastructure to shape a comprehensive water resource project authorization package that will include Poplar Island. Recognizing tremendous fiscal constraints facing your subcommittee, I hope we can also work with you to see that Federal resources necessary to move this project forward as national model will be made available over the coming years. ...

Questions for the Record From Senator Mikulski

General Investigations

Senator Mikulski: Chesapeake and Delaware Canal study, DE & MD. - The Corps is requesting $57,000 to complete the feasibility study. Operation and Maintenance report language was provided in the Fiscal Year 1995 Energy and Water Development Appropriations directing the Corps' attention to the need for navigational safety improvements at **Sandy Point**, in the Chesapeake and Delaware Canal. Please provide the status of progress on this necessary improvement.

General Williams: The ongoing Chesapeake and Delaware Canal Study evaluated the Sandy Point area and concluded that navigational safety improvements could be accomplished under existing Operations and Maintenance authority in advance of any features requiring new authorization. Operations and Maintenance funds are being used, within budget constraints, to initiate this work in Fiscal Year 1995.

Senator Mikulski: The report on this study also identifies navigational safety improvements required at **Reedy Point and Arnold Point anchorage relocation**. Navigational safety is a paramount concern of the Maryland Pilots and the Port of Baltimore, and I believe the Corps should give a high priority to this work. What is the most rapid means to proceed with these improvements, while continuing towards design requirements for the remaining activities?

General Williams: Navigation safety improvements at the Reedy Point entrance flare can be accomplished under existing Operations and Maintenance authority in advance of any features requiring new authorization. Improvements at Reedy Point will be accomplished within budget constraints, in future fiscal years following improvements to Sandy Point bend. Construction of an anchorage in the Arnold Point area would require new authorization; studies to date concluded that improvements were not economical. Local interests may implement improvements if desired.

Construction, General

Senator Mikulski: Baltimore Harbor and Channels, Brewerton Extension Channel - The Maryland Port Administration requests that the Corps of Engineers complete construction of this channel improvement in accordance with the 1958 Authorization (P.L. 85-800), and the General Design Memorandum approved in 1986. The uncompleted project is inadequate for safe vessel passage and completion would allow for removal of costly navigational restrictions which limit traffic movements through the approach channels to the Chesapeake and Delaware Canal. The Port is willing and ready to cost share in the completion of this project in accordance with current cost sharing provisions. If funds are provided, how soon could the Corps initiate this work?

General Williams: Using funds reinstated within Corps' reprogramming authority, the Corps has initiated analysis of navigation safety and economic and environmental issues associated with widening the channel. The Baltimore District could use $339,000 in funds in FY 96 to complete the engineering and design of the extension channel by September 1996. That would allow the Corps to consider budgeting funds for resumption of construction in FY 99, provided the Port Administration is able to enter into a Project Cooperation Agreement for construction in accordance with the requirements of Section 101 of WRDA 86.

Senator Mikulski: Poplar Island, Maryland Restoration Project. We, in Maryland and everywhere in the Chesapeake Bay, very much appreciate the fine work the Corps has for the Bay, particularly in the development of the Poplar Island Restoration project, which has received Special Achievement recognition from the Chesapeake Bay Program Office. We thank you and your staff for your support in fast-tracking this vital project. Initial funding has been provided through the Section 204 program for **Wetland and Aquatic Habitat Creation.** I understand that $12,000,000 is required in Fiscal Year 1996 for the dike construction for this project. Will these funds be made available under the Section 204 program for this work?

General Williams: The Poplar Island Restoration project is being studied for implementation using Section 204 of the Water Resources Development Act of 1992 as the authority. Under this authority, the base disposal plan must be identified and then the Federal share of the incremental cost of the restoration plan is funded from the Section 204 program funds. The incremental amount has not yet been defined but may be between $30 million and $100 million, with about $9 million in Federal funds required in FY96. The estimated scope of this proposed project would strain the capabilities of the Section 204 program. Current projections indicate that the funding requirements for FY97 and beyond would exceed the annual program appropriations limit. Although the Administration has requested the annual program appropriation limit, $15 million for FY96, this is for the entire program. We are currently unable to state that funds will be available for this project if it is approved for implementation under the Section 204 authority.

Senator Mikulski: Hart and Miller Island South Cell, Maryland. The Corps has initiated design of this project which is to be continued under the Section 1135 program for **Project Modifications for the Improvement of the Environment.** When will the plan developed by the Waterways Experiment Station for this project be approved and when could this work begin?

General Williams: The work performed by the Waterways Experiment Station was completed under Section 22 of WRDA 74 which allows the Corps to provide planning assistance to the states. The Baltimore District is considering the applicability of the Section 1135 Authority to implement restoration beyond what was envisioned when Hart and Miller Island South Cell was authorized. The District is currently coordinating with State interests prior to seeking funding for the Section 1135 study. If funded, the study will build on the work done by WES, develop project designs and complete environmental compliance activities. The preparation of the final design and coordination with the resource agencies and the public will likely take six to nine months following receipt of

funds. Construction could begin in FY96.

Operation and Maintenance, General

Senator Mikulski: Baltimore Harbor and Channels, Maryland and Virginia, Chesapeake and Delaware Canal Approaches: Modification to Tolchester Channel "S-Turn". - Modification of the Tolchester Channel to correct the safety problem posed by the difficult "S turn" is necessary for the safe transmitting of this channel. The Maryland Pilots have participated in ship simulation studies which confirm the navigational difficulties posed by the existing alignment which can be improved to safely handle the larger vessels which currently transit this channel with much trepidation. I understand that the Corps will complete a report that addresses the economic, environmental and safety concerns of this modification. Funds required for completion of design of this channel realignment should be given high priority in Fiscal Year 1996, and the Corps should include in the fiscal year 1997 budget request, funds for construction of this necessary safety improvement. Please provide the status and schedule for this work.

General Williams: Straightening of the Tolchester Channel "S-Turn" is considered new work dredging and can not be accomplished under the Operation and Maintenance, General program. Straightening of the "S-Turn" is being addressed by the Philadelphia District in the cost-shared Chesapeake and Delaware Canal Deepening Feasibility Study which is scheduled for completion in September 1996. Additionally, ship simulation exercises studies were initiated in December 1994 to assess navigation safety. The Association of Maryland Pilots have not participated in the actual simulation studies yet, but did participate in an early phase of the studies which traced ships transmitting the channel using a differential global positioning system. The data from this portion of the study is being analyzed and the ship simulation exercises are scheduled to commence int he Fall of 1995. Study results would not be available until Spring 1996 and this would not allow the Corps to consider budgeting for construction funds for this project in FY97.

Senator Mikulski: Intracoastal Waterway, Delaware River to Chesapeake Bay, Delaware and Maryland, - Shoreline Stabilization at Sandy Point. - Are additional funds required to proceed with shoreline stabilization to correct the safety hazard resulting from shoreline erosion at this location?

General Williams: No additional funding is required for the Sandy Point erosion problem at this time. Advance maintenance dredging of the width of the canal at Sandy Point is planned for Summer 1995. Evaluation of the erosion or lack thereof will then take place during FY96 to determine if stabilization is necessary to alleviate any navigational safety problem.

Senator Mikulski: Upper Chesapeake Bay Dredged Material Management. The

requirements for adequate disposal capacity, particularly in the Upper Bay, is of concern as maintenance of the navigational channels affects the operations of the Port of Baltimore. Although the Corps of Engineers is working with the Port in implementation of suitable sites on a timely basis, there is a pressing need to pursue all options, including open water sites, as well as beneficial uses of dredged material and habitat restoration projects in response to the August 1994 Federal Agencies Agreement on Ecosystem Management in the Chesapeake Bay. The current effort to use dredged material to stabilize the eroding shoreline at Aberdeen Proving Ground would reduce the risk of erosion of contaminants that could cause severe degradation of the Upper Bay. I request that the Corps report on its plan and progress towards implementation of suitable sites to assure the continued maintenance of these important navigational channels, and advise whether current funding levels are adequate to maintain navigation needs.

General Williams: The State of Maryland is responsible for providing suitable dredged material placement ares for the Baltimore Harbor and Channels project. The Corps' Baltimore and Philadelphia Districts are working closely with the State on its Dredging Needs and Placement Options Program to identify short term, 0 to 5 years, dredged material placement areas, the Corps is developing a Dredged Material Management Plan to identify long term, five to twenty years, dredged material placement areas, which are environmentally acceptable, technically feasible, and economical. These alternatives include beneficial uses such as island, wetland, and oyster bar creation, habitat development, and beach nourishment, as well as open water and habitat development, and beach nourishment, as well as open water and confined dredged material placement areas. The primary focus of the Baltimore District's placement options include the State's CSX/Cox Creek confined placement facility which will handle contaminated material from Baltimore Harbor and the Poplar Island Restoration project which will handle clean dredged material for the next 12 to 15 years. The Corps is also working with the State of Maryland, Federal and State environmental agencies, and Aberdeen Proving Ground to see if dredged material can be used in the Installation Restoration Program to remediate CERCLA sites at the Proving Ground. Due to chemical contamination, unexploded ordinance, CERCLA liability issues, large areas of sensitive wetlands and shallow water habitat, and areas still being used as firing ranges, it has been difficult to locate suitable dredged material placement areas. The Corps will continue to work the State to assure that suitable dredged material placement areas are available to maintain the navigation channels. Current funding levels are adequate to maintain navigation needs.

Water Resources Development Act of 1995
DRAFT BILL LANGUAGE

POPLAR ISLAND PROJECT AUTHORIZATION

1. **Poplar Island, Maryland.**

(a) In General - The Secretary shall carry out a project for the protection, restoration, and creation of aquatic and ecologically related habitat at Poplar Island, Maryland, in accordance with the Section 204 Initial Appraisal Report, dated August 1994, at an estimated total cost of $ 55,000,000.

(b) Non-Federal Participation.

(1) Cost Sharing - The non-Federal share of the cost of developing and constructing the project under this section shall be 25 percent.

(2) Lands, easements and rights-of-way - Non-Federal interests shall provide lands, easements, and rights-of-way necessary to carry out the project, the value of which shall be credited against the non-Federal share.

(3) Non-Federal interests shall be credited for costs associated with pre-feasibility and design costs expended in project development.

(c) Determination of Construction Costs. Costs associated with this project are limited to those study, design and construction costs necessary to provide for the initial dike construction of the project, and do not include dredging, transportation, and disposal costs which will be funded under the associated navigation project Operation and Maintenance activity, subject to applicable cost-sharing.

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS ACT OF 1996
(Draft Report Language)

Corps of Engineers--Civil

Construction, General

Wetland and Aquatic Habitat Creation. (Section 204)- Within available funds, the bill includes $12,000,000 for the **Poplar Island, Maryland Restoration Project.** Funds required for completion of the dike construction for this project should be included in the fiscal year 1997 budget request, subject to execution of a cost sharing agreement requiring the non-Federal sponsor to provide 25 % of all costs associated with design and construction, including provision of all lands, easements and rights-of-way, and necessary relocations. The local sponsor shall be credited for pre-feasibility and design costs in carrying out this project. Operation and Maintenance, General funds should be budgeted for the 10-year dredged disposal operations required for completion of this environmental restoration project, such costs to include dredging, transportation of dredged material, and disposal costs required for habitat restoration.

INTER-OFFICE MEMORANDUM

TO: Lee Zeni
David Chapin
R. Miller
W. Young
F. Hamons

FROM: G. Savage

DATE: July 27, 1995

SUBJECT: Poplar Island Cost Sharing

1. I have researched Public Law 102-580, the Water Resources Development Act of 1992 (WRDA '92, and EC 1105-2-209, Implementing Ecosystem Restoration Projects In Connection With Dredging, as to the issue of in-kind services performed by the State of Maryland in connection with the design and construction of the Poplar Island Restoration Project.

2. Section 204 of WRDA '92 is silent as to in-kind services, an extract is attached as Incl 1. EC 1105-2-209, in Section 3.e. provides the authority for Section 204 projects, identifying the non-Federal interests agreement to pay 25% of the construction costs, and 100 % of the O&M. This section also limits costs to incremental construction costs in excess of the base plan, as discussed in Section 4.a. The requirements of Section 3.e. and 4.a. are consistent with Section 204. However, Section 4.c. "Cost Sharing", includes a statement that "No credit will be allowed for work-in-kind." (Incl 2). This limitation on local co-operation appears to be inconsistent with the cost sharing provisions of Public Law 99-662, WRDA '86, where in Section 105. "Feasibility Studies; Planning Engineering and Design, non-Federal interests may provide "Not more than one-half of such non-Federal contribution may be by the provision of services, materials, supplies, or other in-kind services necessary to prepare the feasibility report." (Incl 3). Please note that the non-Federal share of Feasibility costs is 50%, compared to 25% of Section 204 costs, and WRDA '86 does not provide for in-kind services for Planning, Engineering, or Design.

3. I believe that the Baltimore District has properly advised the State on the issue of in-kind services, as related to the monitoring plan for Poplar Island. Costs that are the responsibility of the non-Federal interest can only be credited in authorizing language. The State should assure that such costs are properly identified in the feasibility report and related documents in support of the Project Cost Sharing Agreement (PCA). A draft PCA is currently under review by MPA.

4. The draft authorization language provided to MDOT for consideration in WRDA '95 Poplar authorization (Incl 4) addresses this concern in Section (b) (3), providing credit to non-federal interests. Similarly, Appropriations language drafted for FY 96 appropriations addresses this concern. As WRDA and appropriations processes are continuing, albeit time is running out, MDOT should be apprised of this issue. It may be appropriate to tie this into continuing actions

related to the Funding Alternatives For the Poplar Island Restoration Project report by Dr Steinberg, which addresses the base plan, funding, appropriation and authorization requirements for Poplar.

5. On a related matter, the Senate Appropriations Sub-Committee confirmed to me this morning that the Committee mark-up provides $2.5 million for Section 204 projects. However, they are "working with the State of Maryland on obtaining funding for Poplar Island." I asked if it is still possible to increase the 204 appropriation. I was advised it was still possible, however an offset must be made. In this respect, Mr Gwaltney, SAC, advised he would discuss with Don Cluff, HQUSACE Programs Director, whether the Construction, General account bottom line could be reduced by $12.5 million to offset this increase. Mark Dyner of Senator Sarbanes office, advised Charlie Stek as to these discussions. Full Committee mark-up may be completed this week.

cc: R. Smith
C. Donovan

INTER-OFFICE MEMORANDUM

TO: Lee Zeni
David Chapin
R. Miller
W. Young
F. Hamons

FROM: G. Savage

DATE: July 27, 1995

SUBJECT: Poplar Island - Non-Federal Design and Construction

1. Public Law 99-662, the Water Resources Development Act of 1986 (WRDA '86), at Sections 203, 204, 205, and 207, provides procedures for credit and reimbursement to non-Federal interests to conduct feasibility studies for harbor projects (Section 203); or construct projects upon completion of studies and engineering by the Federal government, in accordance with agreements from the Secretary of the Army (Section 204). Section 205 provides procedures for Federal agency environmental coordination and permitting requirements. Section 207 allows for construction in usable increments. USC citations for these regulations are 33 USC 2231, 2232, 2233, and 2235, as attached.

2. From my knowledge, there is limited experience with Section 203. Several projects or project increments have been developed under the Section 204 procedures, and the Corps and Sec Army are comfortable with these procedures. I can not speak for non-Federal interests, but that can be easily checked out. As we are within 60 days of completion of draft feasibility studies for Poplar, I believe it is appropriate to meet with HQUSACE officials to discuss whether it is advantageous to the Port to proceed under these authorities. I believe the appropriate individuals are Dave Sanford and Rich Worthington, Office of Policy Review and Analysis, and Dr Edward Dickey and Zoltan Montvai, Office of Planning. These individuals have all participated in Poplar meetings and are knowledgeable about the current issues.

REPORT TO THE MANAGEMENT COMMITTEE
PLACEMENT OPTIONS PROGRAM
SPARROWS POINT

August 02, 1995

1. Investigations are continuing to identify alternative uses for dredged material at upland sites on Sparrows Point.

   - MPA and MES have been talking with the US Army Corps of Engineers, Waterways Experiment Station, the Port of Toledo, USDA, University of Maryland and private consultants about the feasibility of recycling dredged material and other waste to create soil products.

   - MPA and MES met with Baltimore County officials to discuss using upland property "optioned" to the county as a potential site for soil manufacturing.

   - MES is preparing a proposal in response to a request from MPA to conduct a pilot project for reclaiming dredged material.

2. A small embayment north of Lloyd Point along Bear Creek has been identified as a possible location for a "showpiece" wetland creation. The estimated size of the site is 70 acres. Approximately 700,000 CY of material would be needed for the project construction. Additional studies are required to determine the feasibility of the project.

September 5, 1995

MEMORANDUM

TO: Bill Lear, MPA

FROM: Cece Donovan, MES

SUBJECT: Beryllium Analyses Related to CSX/Cox Creek

Attached is the copy of results of dredged material analyses for beryllium which have been performed as part of HMI pre-dredge analysis. Basically, the spreadsheets show that we have not detected beryllium in any of the 30 or so samples which were analyzed for this element. The spreadsheets also show that we typically don't analyze for this element in pre-dredge analysis. Here are some more general notes about beryllium.

- Beryllium is used in combination with copper to form an alloy. In this form, it is used in atomic reactors, aircraft, rockets and missile fuels and electrical equipment.

- Beryllium is currently regulated through the following federal environmental regulations: RCRA (hazardous wastes); the Clean Air Act; the Clean Water Act (NPDES and Ocean Dumping Regs.); and the Safe Drinking Water Act. It is a listed priority pollutant and is classified as a toxic, carcinogenic metal.

- There is no TCLP limit for leachate currently set for beryllium under RCRA.

- Beryllium is a carcinogen, and is toxic, with pathways for humans being oral/respiratory/skin.

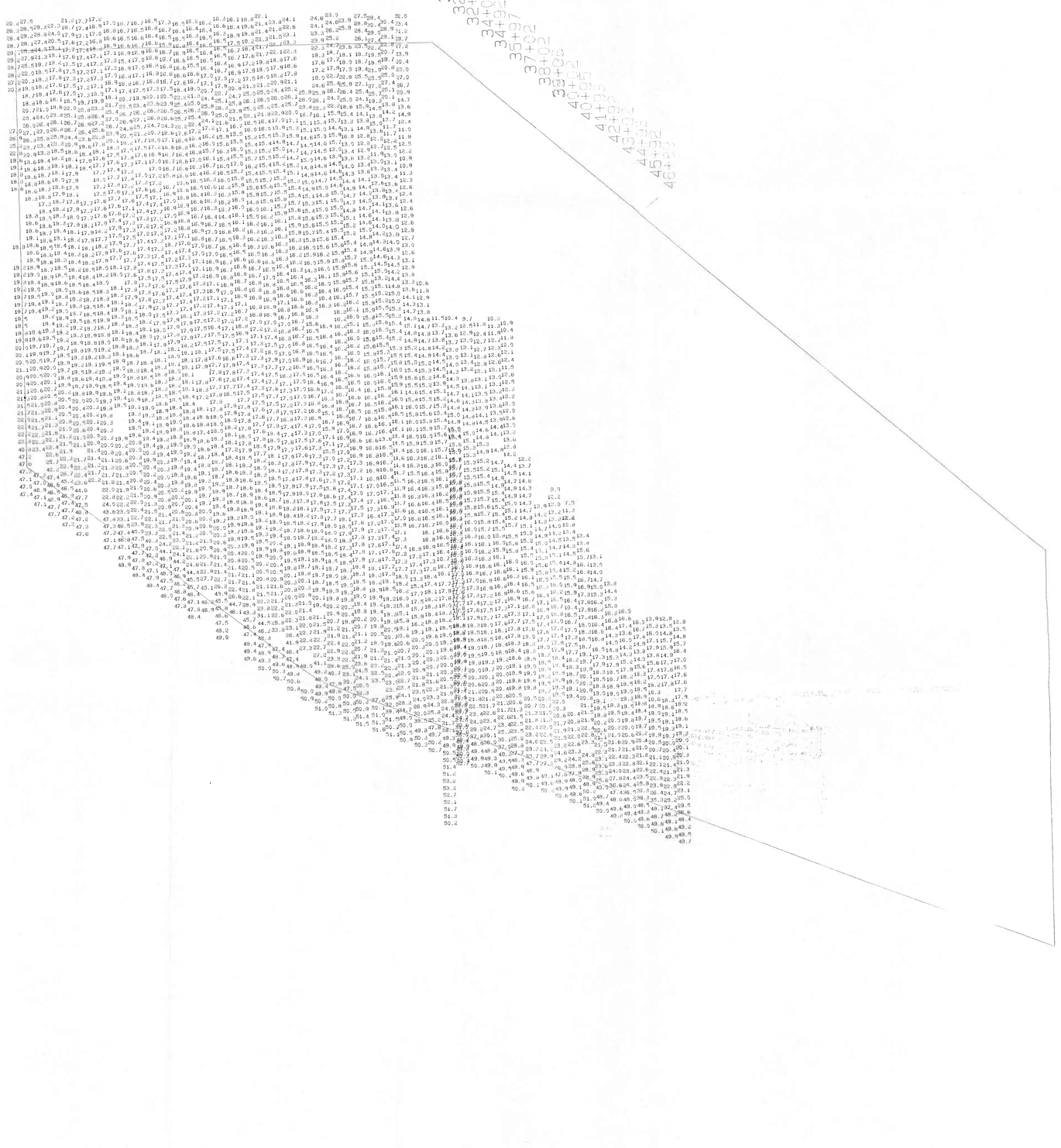
- The Maximum Contaminant Level in drinking water for public water supply systems is 4 parts per billion (.004 ppm).

- Mean concentrations of beryllium in U.S. drinking waters are .013 ppb.

- Average beryllium concentrations in different natural rock types are listed below:

Granitic Rock	2.0 ppm
Shales	3.0 ppm
Deep-Sea Clays	2.6 ppm
Sandstone	0.3 ppm
Carbonates	0.2 ppm

cc: Michelle Vargo

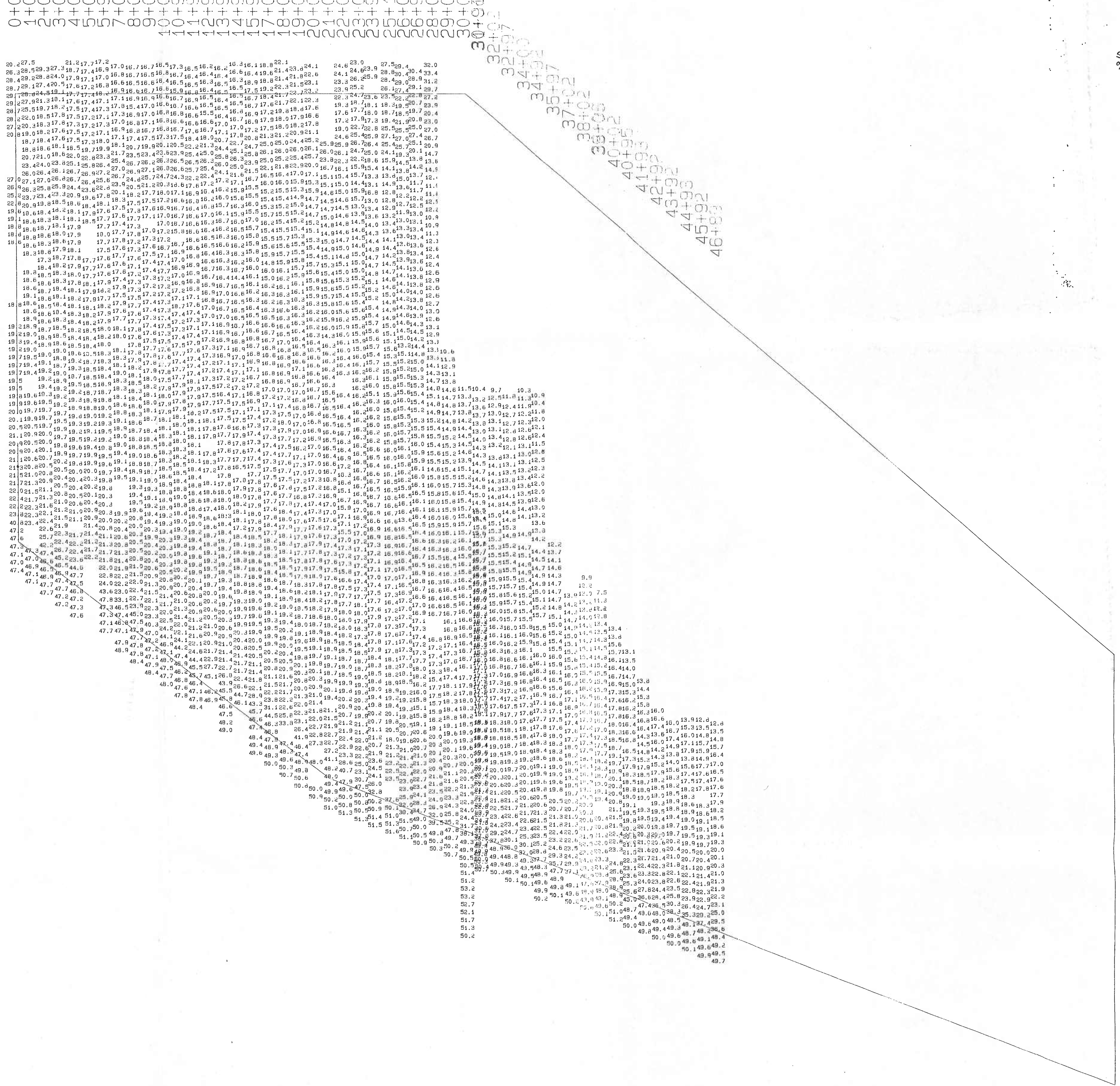


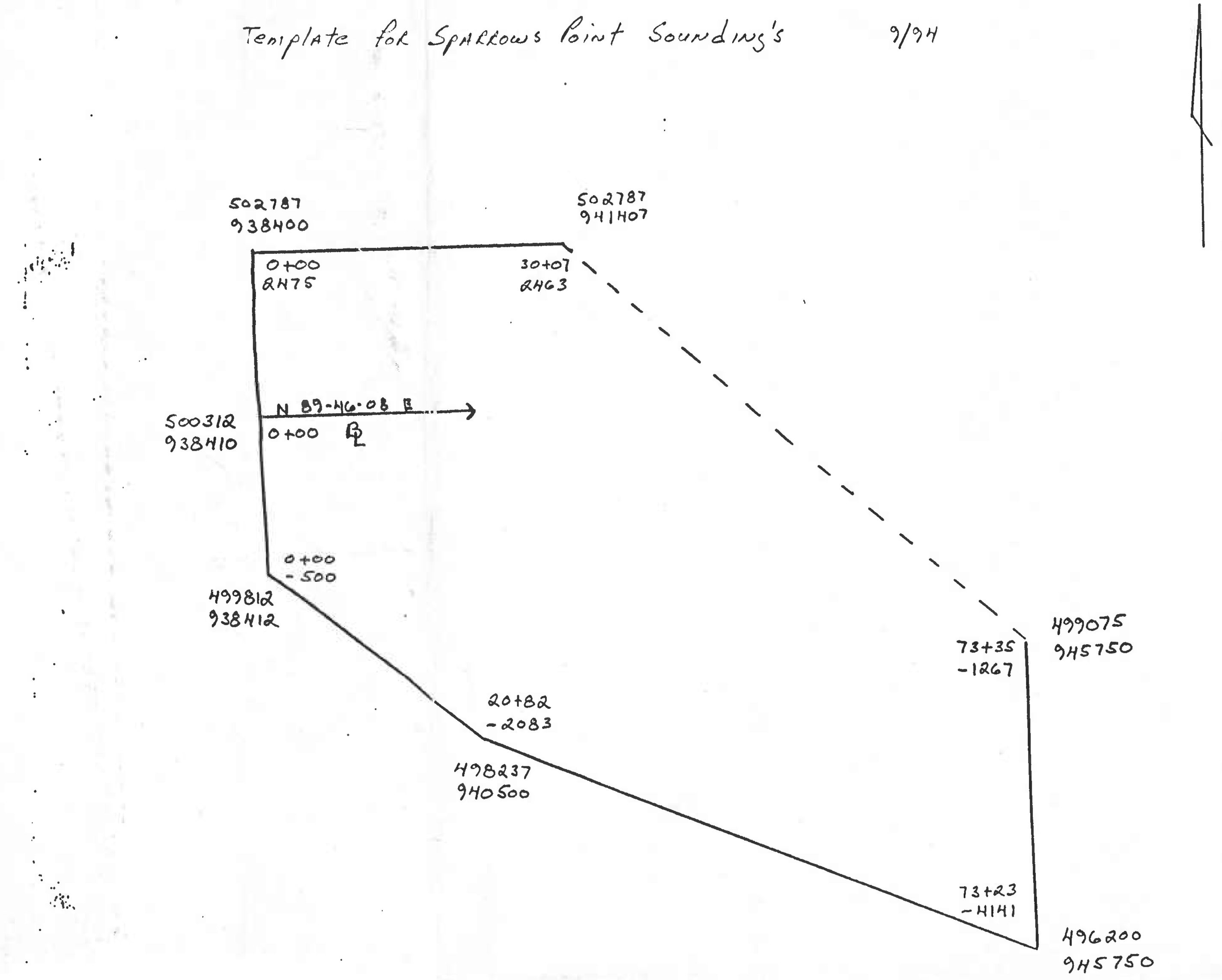
MARYLAND PORT ADMINISTRATION
BALTIMORE, MARYLAND

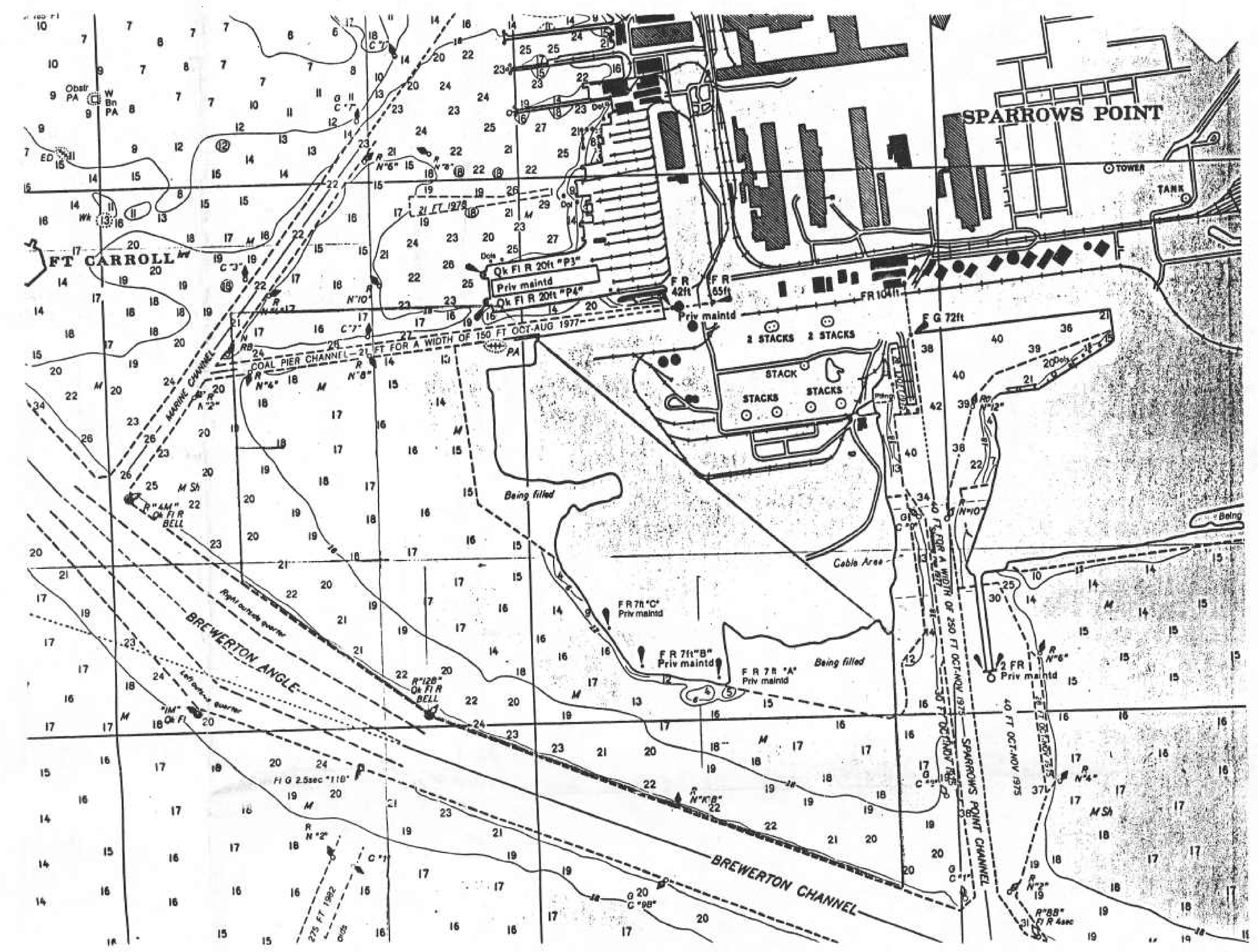
SPARROWS POINT SOUNDING'S

8/94 - 9/94

SCALE: 1 INCH = 400 FEET







MARYLAND PORT ADMINISTRATION

BALTIMORE, MARYLAND

SPARROWS POINT SOUNDING'S

8/94 - 9/94

SCALE: 1 INCH = 400 FEET

NOTES

1. Soundings Are In Feet And Tenths And Refer To Mean Low Water Baltimore City Datum
2. Soundings Taken 5-2-91

NO.	DATE	REVISION	BY

MARYLAND PORT ADMINISTRATION
DIVISION OF ENGINEERING
SPARROWS POINT

CONDITION SURVEY

SOUNDINGS

MARYLAND PORT ADMINISTRATION

APPROVED:

DIRECTOR OF ENGINEERING

DATE: ____

DATE: MAY, 1991
SCALE: 1"=300'

CONTRACT NO.

DRAWING NO. 1 OF 1

PF-3-8/1-50

SURVEYED BY: ____
DESIGNED BY: ____
DRAWN BY: ____
TRACED BY: ____
CHECKED BY: ____

BATHYMETRIC